User’s manual

Apollo

Wall Management Software
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This issue refers to Apollo 1.9, Release date November 2006.

Main changes of Apollo 1.4 compared to Apollo 1.3

Apollo Explorer

FRG viewer

Visu viewer

Cottus viewer

WEB viewer

Mpeg viewer

VTplus Viewer

New features of Release 1.4 SR1

Property pages for the RGB sources (FRG viewer, Visu viewer)

Automatic adaptation of Visu configuration file

New features of Release 1.4SR3, May 2003:

Support of OverView D series

Support of shortnames for command line parameters

Support of additional parallel ports in the Eos/Argus

Support of Asian languages (cf. Apollo Internationalization)

New Apollo font settings (cf. Apollo font settings)

New features of Release 1.4SR4, August 2003:
Backup/Restore of Apollo projects
New option in viewer decoration
Window property in Layout Editor

New features of Release 1.5, November 2003:
VNC compatible viewer
SOAP API Service
Automatic update of local projects

New features of Release 1.6, April 2004:
Support of streaming video card in FRG Viewer
ProServer
RemotePointer
XP Support

New features of Release 1.7, January 2005:
Support of SDI card in FRG Viewer
Gateway functionality for Cottus Viewer
Colored border for Viewer contents
Place IDCs outside of the insertion
Area for unexpected windows
Synchronize load/unload layouts
Autoload functionality
Scenario controller

New features of Release 1.8, October 2005:
Enhanced layout editor (incl. Display Wall, Default Area, Viewer sources
Preview in Remote Desktop
Support for SCN in FRG Viewer
Support of TransForm A12

New features of Release 1.9, November 2006:
Remote Desktop includes a source treeview
Resize non-sizeable windows (Remote Desktop)
Customized hotkeys for ProViewer
Context aware disconnect for ProViewer, RemotePointer
Support of source selection (OverView D with dual DVI interfaces, support implemented since Apollo 1.8SR1)

Corrections

To

- **Barco Control Rooms GmbH**
  An der Rossweid 5 • D-76229 Karlsruhe • Germany
  Phone (49) (721) 6201-0 • Fax (49) (721) 6201-298
  E-mail docu.de.bcd@barco.com, Web www.barcocontrolrooms.de

Sender _____

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1 Preliminary remarks

This brochure is directed towards administrators and users of Display Walls. It describes how to use the Wall Management Software Apollo to efficiently manage and administrate information on a Display Wall from a local workstation.

This document describes the installation and configuration of the Apollo Wall Management software as well as all operating steps.

1.1 Styles and symbols

The typographic styles and the symbols used in this document have the following meaning:

Bold	Labels, menus and buttons are printed in **Bold** font.
Condensed	Links to both other chapters of this manual and to sites in the Internet are printed condensed. In the on-line version of this manual all hyperlinks appear teal.
`Courier`	Names of files and parts from programs are printed in the `Courier` font.
`Courier bold`	Inputs you are supposed to do from the keyboard are printed in **`Courier bold`** font.

If you do not heed instructions indicated by this symbol there is a risk of damage to the equipment!

If you do not heed instructions indicated by this symbol there is a risk of electrical shock and danger to personal health!

If you do not heed instructions indicated by this symbol there is a risk of damage to parts, which are sensitive towared electrostatic charge!

If you do not heed instructions indicated by this symbol there is a risk to get harmed by sharp objects!

If you do not heed instructions indicated by this symbol there is a risk that parts may explode!

If you do not heed instructions indicated by this symbol there is a risk that hot parts impact persons or objects!

The sheet icon indicates additional notes.

Next to this icon you find further information.

This arrow marks tips.

Next to this icon you find important notes.

2 Introduction

2.1 Summary

Modern Display Walls have begun arriving wherever current information is to be displayed for and made available to a larger number of people at the same time. The display wall is the central information medium in control stations and control rooms, although all employees have their own monitors to perform their respective duties. Such a scenario requires that the Display Wall can be controlled from remote locations or workstations. This means it should be possible to open a window on the Display Wall from a separate workstation and to resize or reposition this window as well.

The Apollo Wall Management software for Windows 2000, Windows XP meets this requirement comfortably. This software permits access to the Display Wall from any desired computer within the network. You are able to predefine entire window layouts to be activated when specified.

2.2 Apollo components

Apollo comprises several client and server application which communicate via the **Control Room Bus**.

Server applications which manage resources such as projectors or the desktop of a Display Wall are installed and used on central Server computers. These applications are started automatically during booting or log in.

The interactive client applications are graphical user interfaces to provide access to the services of the central servers. If required they can started multiple times on each workstation of the Apollo network.

The Apollo Wall Management software consists of the following components:

Control Room Bus

The Apollo software runs distributed on different computers. The **Control Room Bus** supplies the communication infrastructure for the computers integrated into the Apollo network. It also includes several system utilities and an easy user interface. The Control Room Bus is based on the TCP/IP protocol and started automatically during booting.

Desktop Server

This component runs on the control computer (TransForm A) of the Display Wall. It receives commands from the interactive client applications of the workstations and converts them into activities to manipulate the windows of the Display Wall.

Layout Editor

The **Layout Editor** is used to create and modify so-called layouts. Layouts usually consist of several windows and/or shortcuts and define which windows are to be loaded in which position using what size. Every layout is saved in a database using a unique name. Every Display Wall has its own database located on the associated control computer or on any other network computer.

The **Layout Editor** is also used to define **regions** on the Display Wall. By means of **regions**, specific permissions can be assigned to user groups.

Security Provider

The permissions of users to access and modify certain objects are controlled by Access Groups. An object can be assigned to a number of Access Groups, each of which having individual permissions. Before a certain action is performed, the permission of the user is checked. If the permission is given, the system will execute the action, else not.

Checking is done by the Security Provider which is a separate party on the Control Room Bus.

SNMP Manager

The SNMP Manager is the interface between the Control Room Bus and the Simple Network Management Protocol (SNMP). The SNMP Manager provides the possibility to use a configuration file to integrate any SNMP-capable device.

Explorer

The stand-alone applications Remote Desktop, Layout Selector and Device Manager are now integrated in one application, the Apollo Explorer. Controlling a Display Wall now requires only launching the Apollo Explorer.

Remote Desktop

The **Remote Desktop** is integrated in the Explorer and enables to manipulate the windows of the Display Wall from a separate and remote workstation.

If required, the user interface of the Explorer can be adapted to look like the user interface of the previous stand-alone application **Remote Desktop**.

Layout Selector

The **Layout Selector** is integrated into the Explorer. It allows easily loading and removing layouts from a remotely linked Display Wall. Layouts have to be defined in the **Layout Editor** and saved in a database first.

If required, the user interface of the Explorer can be adapted to look like the user interface of the previous standalone application Layout Selector.

Device Manager

The **Device Manager** is integrated into the Explorer and offers to control the parameters of the devices. The following devices are supported: Barco Reality 6xxx, Barco Graphics 6xxx, analog poly-silicone projector units of the rear projection systems S70, Atlas67CS4, Atlas84CS4, digital poly-silicone projector units of the rear projection systems OverView-mP50 and Atlas67C4, Hermes D2D and Hermes V2A, digital Visu, digital Phoenix, and some third party devices.

Project Backup

Apollo Project Backup uses the Windows Backup tool. The customized script ensures that all relevant files are included into the backup (the files are stored on multiple locations). If e.g. the hard disk of the Desktop Servers crashes, the Apollo project can easily be restored by means of the backup file.

Viewer

Viewers are applications running on the Display Wall and showing the contents of e.g. Internet pages, or digital media streams, analog video etc. Like all other application, the viewer windows can be integrated in a layout.

Desktop Command, Device Command, Viewer Command

Console applications used for sending commands to a Desktop server, to devices, to viewers from the command prompt.

Serial Command, TCPIPCommand

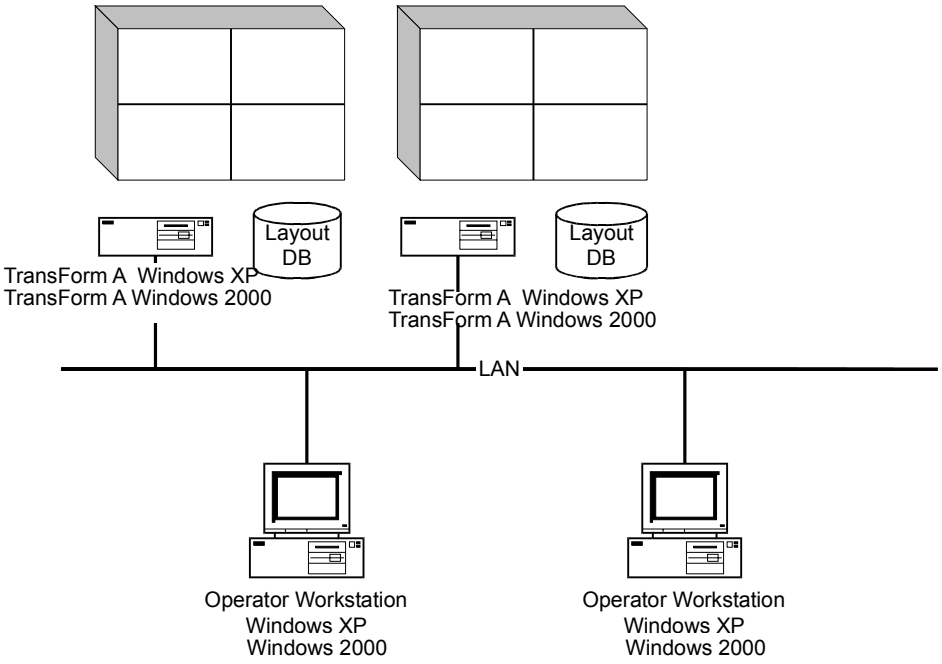
Console applications used for receiving commands via the serial COM interface or via the Ethernet interface. .

Remote Pointer

This is a client application which provides a GUI to move the cursor and to send keystrokes to a remote computer.

SOAP API Service

This component is a development interface to integrate Apollo in customer applications. It is based on the Soap SDK 3.0 of Microsoft.


Layout
DB
Layout
DB
TransForm A Windows XP
TransForm A Windows 2000
TransForm A Windows XP
TransForm A Windows 2000
LAN
Operator Workstation
Windows XP
Windows 2000
Operator Workstation
Windows XP
Windows 2000

3 New functions

3.1 New functions in Apollo 1.9

Apollo 1.9 comes with enhanced functionalities in the Remote Desktop which now includes a source treeview to assign a source to an existing viewer at runtime. In addition non-sizeable windows (e.g. Viewer windows without borders) can now be re-sized..

The ProViewer allows to set customized hotkeys for connect, release control, disconnect and features a context aware disconnect.

For the ProViewer and the Remote Pointer, a context aware disconnect has been introduced.

The FRG viewer supports the new RoHs compliant TransForm A input cards and the TransForm SCN.

Already since Apollo 1.8SR1, the device manager supports the dual DVI input of OverView and allows to set the source selection mode as well as to select the active source.

3.2 New functions in Apollo 1.8

Apollo 1.8 comes with enhanced functionalities in the layout editor which now includes treeview nodes also for the display wall, the default area and the viewer sources. In addition a second treeview can be displayed to allow fast and intuitive copy&paste and drag&drop operations.

The Remote Desktop now shows a preview of the application and viewer windows when possible, and in case of the FRG viewer (where no preview of the content can be shown) the status of the source is indicated by an icon.

The FRG viewer has enhanced property pages for the Streaming Video Card and supports also to the soon-to-come SCN.

3.3 New functions in Apollo 1.7

Apollo 1.7 comes with the scenario controller which allows defining a sequence of Apollo actions via a graphical user interface. The actions are initiated by triggers which can be defined according the actual requirements.

Apollo 1.7 supports the projections system OverView cPU67-DL and the QuadSDI input card for Eos/Argus controllers. The Layout Editor allows to automatically load layouts and to specify the treatment of unexpected windows. The API interface has been enhanced to support the new applications and functionalities of Apollo 1.7

3.4 New functions in Apollo 1.6

Apollo 1.6 includes the new applications ProServer, ProViewer and RemotePointer. Furthermore the FRG viewer now supports streaming video cards, and the VNC viewer supports TightVnc server. The API interface has been enhanced to support the new applications and functionalities of Apollo 1.6.

3.5 New functions in Apollo 1.5

The number of viewers has been enhanced by a VNC compatible viewer (VNC Viewer) which depicts the screen contents of host workstations on the Display Wall.

For OverView D series, the device support has been enhanced.

An upgrade utility for Apollo projects (starting with projects created with Apollo 1.4x) is provided which automatically converts the project and the database into a current Apollo project.

The SOAP API interface enables the integration of Apollo into customer applications.

For the Web viewer, the scroll bars can be hidden or shown.

3.6 New functions in Apollo 1.4

Support for additional device types as well as several viewers is among the many new functions of Apollo 1.4.

New supported devices are the **Digital Visu**, the **Digital Phoenix** projector, and the **Matrix Switcher**.

Viewers are applications running on display walls, showing different contents. Apollo 1.4 features the following viewers:

FRG Viewer to depict and control analog video and RGB signals connected to a BigVideo Card, QuadVideo Card, or RGB-Input Card in the Eos.

Visu Viewer to depict and control analog video and RGB signals connected to a Video Input Unit, or RGB Input Unit of a digital Visu.

Cottus Viewer to depict screen contents of host workstations on the display wall.

Web Viewer to depict Internet pages.

Mpeg Viewer to depict digital video.

VTplus Viewer to depict video text pages.

All of these **viewers** are running in windows that are customizable concerning position, shifting, and scaling, and can be opened in several instances. The **viewers** are remote controlled.

Previous Apollo applications such as the **Layout Selector**, **Remote Desktop**, **Device Manager** are now integrated into the **Apollo Explorer** and no longer need to be started separately. Just one single application offers you now easy access to all functions running on the Control Room Bus.

The **Apollo Layout Editor** used to define layouts and regions continues to be a stand-alone application that can be used on any computer within the network as long as the layout database can be accessed by this computer.

4 Installation

4.1 Best practice

It is recommended to first read the Readme file located on the CD-ROM in the folder ...\Apollo (CRS-3045)\Apollo 1.8

4.2 Requirements

- Windows 2000 Service Pack 4 or later
- Internet Explorer 6.0 SP1 or later
- Windows Scripting Host 5 or later
- Barco TASK-2k-09 (for TransForm A controller)

or

- Windows XP Professional Service Pack 2 or later
- Internet Explorer 6.0 SP1 or later
- Windows Scripting Host 5 or later
- Barco TASK-XP-09 (for TransForm A controller)
- Barco Snmp RcAgent 1.6 (for device control)

- Barco Windows driver suite 4.2 (for TransForm A controller)
- Funk Software Inc. Proxy Host 5.1 (for Cottus viewer), Gateway 5.1
- VNC 3.3.7 (for VNC viewer)
- TightVnc 1.2.9 (for VNC viewer)

- Microsoft Visio2000 or higher (for Apollo Configurator)
- Microsoft VisualStudio 6.0 SP4 (for software development)

- Barco OCM 1.2 for OverView D projection modules

When running the viewers, please keep in mind that each instance of a viewer requieres about 20MB to 30MB RAM. Upgrade your TransForm A controller accordingly!

Please mind: The Control Room Configurator requires Microsoft Visio 2000 or higher!

These requirements are checked before Apollo is installed. A prompt is displayed to install any additionally required software, if necessary. The Apollo installation then has to be restarted.

In case Windows Scripting Host is missing at your Windows installation, this application is enclosed on the Apollo installation CD ("Apollo (CRS-3045)\Apollo 1.8\public\WindowsScriptingHost" directory).

You need administrative privileges to install the Apollo software. If the computer reboots during installation, users have to log in with administrative privileges after the reboot as well.

When installing, please stick to the following installation sequence: OS level first (Windows2000 WindowsXP), then system level (Windows Driver Suite, Barco RC Agent), finally application level (Apollo, RemotePointer, Screen Host)

4.3 Used ports

Apollo will use the following ports:

Application	ports
Control Room Bus	TCP/IP ports: 4570 and 4571
CottusViewer / Proxy Host	UDP port: 1505
CottusViewer /Gateway	UDP port: 2303
VncViewer / VncServer / TightVncServer	TCP/IP port: 5900
ProServer / ProViewer / RemotePointer	TCP/IP port: 4580
TCP/IP Command interface	TCP/IP port 4585
SnmpMngr	TCP/IP port 4701
RcAgent	TCP/IP port 4700
OCM	TCP/IP port 6063 and 4702

With Windows XP SP2, the firewall is automatically activated and all ports are closed! Make sure to open the above mentioned ports! Without being able to communicate, Apollo will not work!

Please check also if an external firewall is installed. No matter what type of firewall: Apollo can only operate when the ports listed above are open.

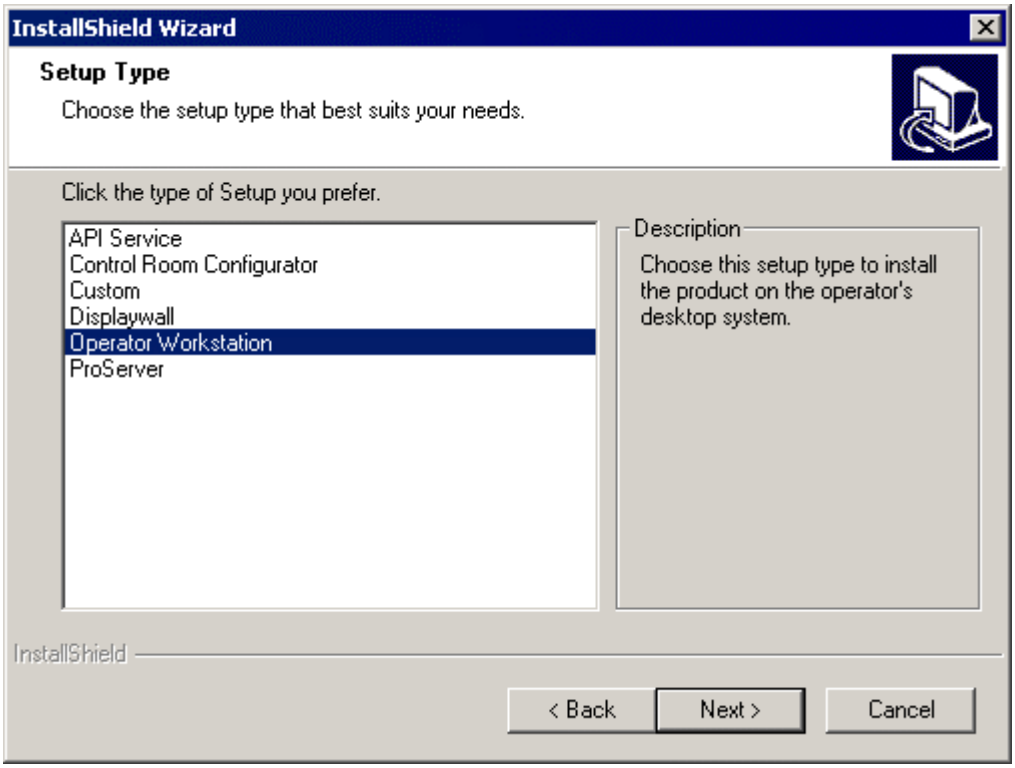
Consult the user documentation about your firewall how to open the ports.

4.4 Setup

You need administrative privileges to install the Apollo software.

Remove any older Apollo installation present on the system before installing a newer version; see "Uninstall Apollo." The files in the Apollo project directory remain intact when you uninstall Apollo!

Place the CD into the CD drive and run **setup.exe**. The Install Shield Wizard will guide you through the installation process. Follow the displayed instructions.



Component	Description
API Service	Select this option to integrate Apollo into customer applications.and to benefit from Apollo Scenario Management.
Control Room Configurator	This component requires Microsoft Visio. Install this component on the computer before configuring the Apollo project.
Custom	Use this option to install one or several of the following components
Displaywall	This component runs on the control computer (TransForm A) of the Display Wall
Operator Workstation	The client components have to be installed on any network computer used to manipulate the Display Wall via the interactive applications.
Layout Editor	The **Layout Editor** can be installed anywhere in the network where layouts are to be created or edited.
Control Room Configurator	This component requires Microsoft Visio. Install this component on the computer before configuring the Apollo project.
Displaywall	This component runs on the control computer (TransForm A) of the Display Wall

Operator Workstation	The client components have to be installed on any network computer used to manipulate the Display Wall via the interactive applications.
ProServer	This component has to be installed on every workstation which screen should be scraped or which has to be controlled by means of the RemotePointer application.

Select the desired component. If **Custom** is selected, define the components to be installed in the **Select Components** dialog

The required files are installed to the **C:\Program Files\Barco Apollo** directory unless otherwise indicated.

The Control Room Bus is installed as a service as well and Apollo shortcuts are generated.

Installation is a completely automatic process.

The **Settings** dialog is displayed once installation has finished. Enter a directory for your Apollo project. Use OK to end the **Settings** dialog.

The system can be reconfigured for any project at any time after the initial installation using the shortcut **Start|Programs|Barco Apollo|Settings,** see also Settings. The project directory including the subdirectory for the Apollo database is created during the installation. This subdirectory is directly accessed by the **Layout Editor**. Share this sub directory if the **Layout Editor** is to be started on a different workstation.

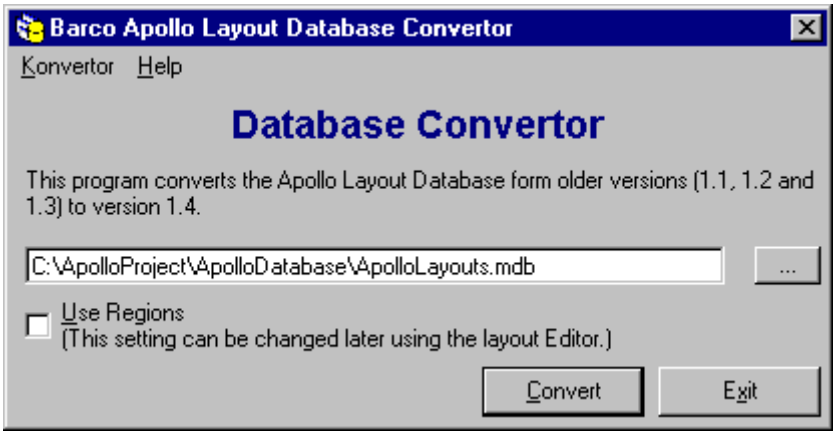
In case of Apollo has been installed on an WinXP platform, make sure that the Apollo project directory allows write access for a user. Change the permission of this directory accordingly. Without write access, Apollo cannot be run.

4.5 Upgrade from Apollo 1.3 to Apollo 1.4

Upgrading from Apollo 1.3 to Apollo 1.4 takes two steps:

4.5.1 1. Converting the Apollo Database

Call the database converter program. Use Windows Explorer to find and click on the file C:\Program Files\Barco Apollo\Program\Databaseconvertor.exe. The following dialog is displayed:


Barco Apollo Layout Database Convertor
Konvertor Help
Database Convertor
This program converts the Apollo Layout Database form older versions (1.1, 1.2 and 1.3) to version 1.4.
C:\ApolloProject\ApolloDatabase\ApolloLayouts.mdb
...
Use Regions
(This setting can be changed later using the layout Editor.)
Convert
Exit

Click on the button with the three dots (**Browse** ...) and select the Apollo database. Click on the **Convert** button to start the conversion process for the required database.

Only a database generated with Apollo Release 1.1, 1.2 or 1.3 can be converted.

If the Apollo database includes regions, and you want to preserve them, the option **Use Regions** has to be checked. If this option is not checked, the regions will be hidden. If later required, they can be shown again using the Layout Editor (**Properties | Display Wall | Use Regions**)

4.5.2 2. Generating current configuration files

Whenever a new Apollo Release or Service Release is installed, the **Visio configuration file** of the Apollo project has to be upgraded, too, in order to generate the most current configuration files.

All configuration files (*.ini, *.cn) are generated by the Apollo 1.4.1 Control Room Configurator.

If the Control Room Configurator was selected when installing individual components and if the standard directory was used for the installation, then the following folder was created**: ... Program Files\Barco Apollo\Control Room Configurator**.

Copy this folder to the following directory:

... \Visio\Solutions

To update an existing Visio configuration proceed as follows:

- In Microsoft Visio, open the template **Control Room Configuration.vst**.
- Right click into the template to open the context menu.
- From the context menu, select **Import and Upgrade Drawing**
  The dialogs pops up to open a file. Browse for the Visio configuration file of the existing project.
- The file will be imported. At the same time, the shapes are updated.
- Save the file
- Create the configuration files by means of the command **Export Files** of the context menu (right mouse click)
- Copy the configuration files into the folder of the **Apollo Project**.

Devices which are controlled via the Barco LCD-DLP SNMP Agent now are updated to be controlled by the Barco RC Agent.

Starting with Apollo 1.4, only the Barco RC Agent is used.

Apollo features a security provider to assign specific permissions to different access user groups. The security provider gets his information from the file AccessGroups.ini which has to be located in a subfolder ServerData in the ApolloProject folder.

The subfolder ServerData and a sample AccessGroups.ini file is created by quitting the Settings Dialog with OK. Then the AccessGroups.ini file can be edited and customized. The modifications will be valid after an additional launching of the Apollo Settings. For more information on the AccessGroups.ini-file, please see Defining accessGroups

4.6 Upgrade from Apollo 1.4 to Apollo 1.4SR1

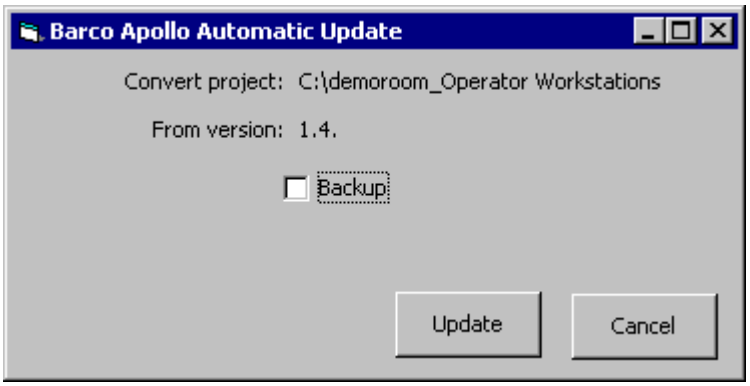
Upgrading from Apollo 1.4 to Apollo 1.4.1 does not require converting the database. However, the update of the configuration files (see above, generating current configuration files) is mandatory.

Starting with Apollo 1.4SR1 the file SerialCommandInterface.ini is split into a file specifying the parameters of the serial interface (SerialCommandInterfaceBasic.ini) and a file allocating the patterns (SerialCommandInterface.ini). When upgrading projects made with former releases of Apollo, the then SerialCommandInterface.ini file remains unchanged, and the entries referring to the COM Port and the baud rate have to be deleted manually! In addition, the Visio drawing has to be updated: the shape "Serial Command interface" has to be replaced by the shape "Command Source"!

4.7 Upgrading from Apollo 1.4 to Apollo 1.5

An **Apollo** project which has been created with Apollo 1.4x is automatically upgraded to Apollo 1.5. No intervention is required.

If the project is selected in the **Apollo Settings** dialog, the version of the project is validated. In case it is later than 1.4x, the following message pops up:



Select **Backup** to make a copy of the old project.

Only projects created with Apollo 1.4x are updated automatically. All other projects have to be upgraded as described in chapter Upgrade from Apollo 1.3 to Apollo 1.4.

Please note, that if the **Apollo** project includes the **Phoenix** projector, it also has to be upgraded manually.

Settings
Can not automaticaly convert project data!
Project contains Phoenix configuration!
Please use the Control Room Configurator to update project data!
Version: 1.4.
OK

Projects with Phoenix projectors require a manual update as described in chapter Upgrade from Apollo 1.3 to Apollo 1.4.

4.8 Upgrading from Apollo 1.5 to Apollo 1.6

An **Apollo** project which has been created with Apollo 1.5 is automatically upgraded to Apollo 1.6. No intervention is required.

4.9 Upgrading from Apollo 1.6 to Apollo 1.7

An **Apollo** project which has been created with Apollo 1.6 is automatically upgraded to Apollo 1.7. No intervention is required.

4.10 Upgrading from Apollo 1.7 to Apollo 1.8

An **Apollo** project which has been created with Apollo 1.7 is automatically upgraded to Apollo 1.8. No intervention is required.

4.11 Upgrading from Apollo 1.8 to Apollo 1.9

An **Apollo** project which has been created with Apollo 1.8 is automatically upgraded to Apollo 1.9. No intervention is required.

4.12 Upgrading the Display Wall configuration

Whenever new and/or additional devices are added to the configuration, this expansion of the Display Wall configuration has to be included into the Visio drawing!

All configuration files (*.ini, *.cn) are generated by the Apollo 1.8 Control Room Configurator.

If the Control Room Configurator was selected when installing individual components and if the standard directory was used for the installation, then the following folder was created**: ... Program Files\Barco Apollo\Control Room Configurator**.

Copy this folder to the following directory:

... \Visio\Solutions

To update an existing visio configuration proceed as follows:

- In Microsoft Visio, open the template **Control Room Configuraton.vst**.
- Right click into the template to open the context menu.
- From the context menu, select **Import and Upgrade Drawing**
  The dialogs pops up to open a file. Browse for the Visio configuration file of the existing project.
- The file will be imported. At the same time, the shapes are updated.
- Adjust the configuration (add/modify the devices)
- Save the file
- Create the configuration files by means of the command **Export Files** of the context menu (right mouse click)
- Copy the configuration files into the folder of the Apollo Project.

Starting with Apollo 1.4 SR3, an existing Apollo Explorer.ini file is automatically upgraded in case devices which are supported for the first time are added to the configuration.

This upgrade maintains the existing customizations of e.g. the context menus of the devices.

5 Control Room Configurator

The Control Room Configurator is a VISIO application used to create all configuration files.

5.1 Requirements

Microsoft Visio2000 or higher

In case of Visio 2003, the follwing settings must be made:

Macro Security: medium (or low)

File path settings (Tools|Options)

Templates: C:\Program Files\Barco Apollo\Control Room Configurator

Stencils: C:\Program Files\Barco Apollo\Control Room Configurator

Add-ons: C:\Program Files\Barco Apollo

5.2 Installing Control Room Configurator

If the Control Room Configurator was selected when installing individual components and if the standard directory was used for the installation, then the following folder was created**: ... Program Files\Barco Apollo\Control Room Configurator**.

Copy this folder to the following directory:

... \Visio\Solutions

This refers to Visio 2000 only. For higher versions of Visio, the above mentioned settings must be done!

For Visio 2000, also the paths can be set as described above (Tools|Options). This will allow you to work with directories other than ...\Visio\Solutions.

Now all of the following files are located in the directory **...\Visio\Solutions\Control Room Configurator**:

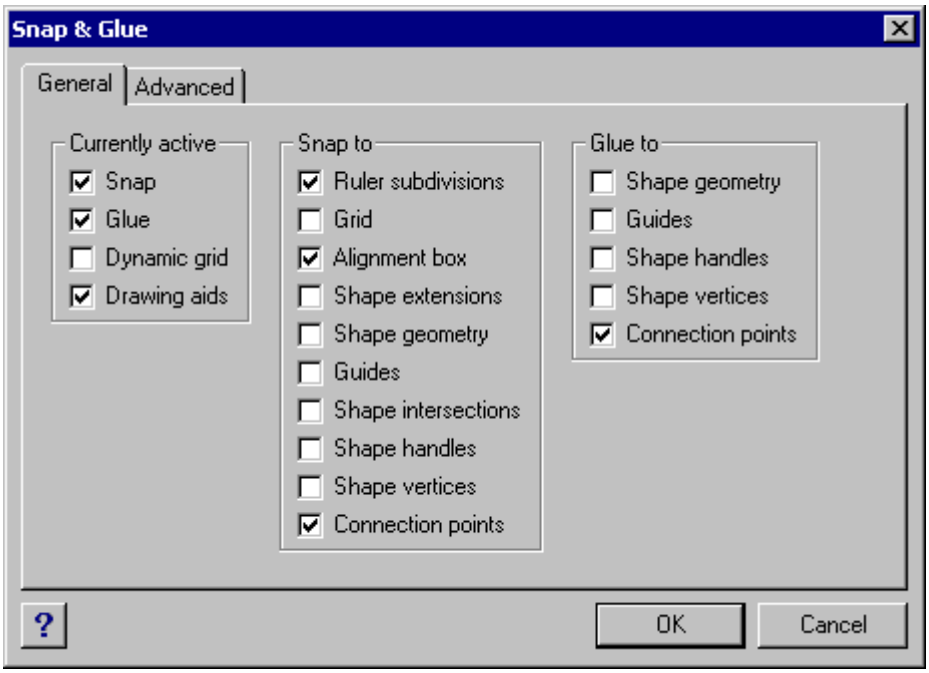
		Notes
Resources (Folder)	Apollo.lic Clkserv.cn Excluded Windows.ini Pmxtext.inc Startup.ini	
Examples (Folder)	Examples.vsd	Configuration examples:
Control Room Configuration.vst		Template for creating a configuration
Connectors.vss		Templates (Connections)
Devices.vss		Templates (Barco Hardware)
Software.vss		Templates (Apollo Software)
Third Party.vss		Templates (Additional Products)

5.3 Basic principles of creating a configuration

Basic Microsoft Visio and template knowledge is assumed.

5.3.1 Recommended Visio settings

Please select the following options in **Tools|Snap&Glue|General**:



When drawing the projection modules, it is recommended to click Alignment Box.

5.3.2 Template and shapes

Have a look at the file **Examples.vsd** located in the folder **...\Visio\Solutions\Control Room Configurator\Samples**. There you can learn how to use the **Control Room Configurator** to configure an Apollo project.

A functional document has to be based on the template **Control Room Configuration**!

This template is located in the folder **...\Visio\Solutions\Control Room Configurator**

To create a configuration, proceed the following way:

Select **File|New|Control Room Configurator|Control Room Configuration**

A new Visio document is opened based on the template **Control Room Configuration**. Attached to this document are the Barco stencils. Use the shapes provided by these stencils to create the Apollo project.

Use the shapes of **devices** to configure the Display Wall. Select the required projectors and their control unit. Do the cabling by means of the **connectors**.

The template utilizes the three levels "control," "data," and "LAN." These levels are identified with the following colors.

Level	Color
Control	red
Data	blue
Network	green

These levels can be individually hidden or displayed.

The **Control Room Configurator** makes it possible to depict hardware and software configurations of Barco Display Wall using the help of specific shapes.

Link lines (connectors) can be attached only at connection points located within the small red, blue, or green squares.

Red Square:	Control Connection
Blue Square:	Data Connection
Green Square:	Network (LAN) Connection

Links are possible only within one level! Invalid connections/links don't click into the connection points.

Dotted connection lines lead to invalid configuration files! Links are possible only within one level (color)! Connection lines can be attached only to connection points.

In early Apollo Release, there were two types of protocols to control devices, the Barco LCD-DLP Agent protocol and the Barco RC Agent protocol. Now the Barco RC Agent can address and control every device of a Display Wall, and the LCD-DLP Agent is no longer necessary.

There are 4 template groups:

Template Collection	Content
Connectors.vss	Connections
Devices.vss	Barco Hardware
Software.vss	Apollo Software
Third Party.vss	Additional Products

Properties have been defined for most objects that can be used to specify parameter values required for the creation of configuration files.

Specified values may not contain any blank spaces!

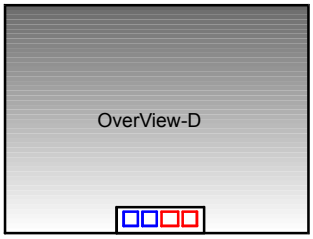
The **Properties** window can be opened permanently (**View|Custom Properties**). This command is available via the regular menu as well as the context menu (right mouse button). Double-clicking on the object also opens the **Properties** window.

The following is a brief overview of the templates representing Barco hardware and Barco software.

5.3.2.1 Stencils Devices.vss

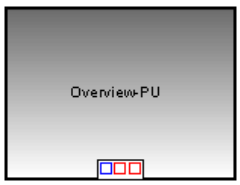
Starting with Apollo 1.4SR3, all modular projection cubes can be drawn with the same shape (shape of OverView-mP, or shape of AtlasC4, or shape of AtlasCS4, or shape of Phoenix). The actual device is indicated by the respective Type of Module in the Custom Properites listbox of the shape.

5.3.2.2 Projection module OverView D



Custom Properties:	**Type of Module**	OverView D
	Address	Input a value between 1 ... 255
Data Connection Point (blue):	**DVI_Digital_Input**	Possible to connect with • **DVI_Digital_Output** of AGX graphic cad/ UGX graphic card/TransForm A OmniScaler
Control Connection Point (red):	**Serial_Input**	Possible to connect with **Serial_Output** of previous device or the control computer
	Serial_Output	Possible to connect with **Serial_Input** of subsequent device

5.3.2.3 Projection module OverView PU

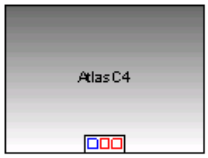


Custom Properties	Type of Module	OverView-cPU67-DL (should not be changed)
Data Connection Point (blue):	**VGA_Digital_Input**	Possible to connect with **VGA_Digital_Output** • of the digital graphic card
Control Connection Point (red):	**Serial_Input**	Possible to connect with **Serial_Output** of previous device or the control computer
	Serial_Output	Possible to connect with **Serial_Input** of subsequent device

5.3.2.4 Projection module OverView-mP

Custom Properties	Type of Module	OverView-mP (should not be changed)
Data Connection Point (blue):	**VGA_Digital_Input**	Possible to connect with **VGA_Digital_Output** • of the digital graphic card • the digital output of Hermes D2D • the digital output of Hermes V2A
Control Connection Point (red):	**Serial_Input**	Possible to connect with **Serial_Output** of previous device or the control computer
	Serial_Output	Possible to connect with **Serial_Input** of subsequent device

5.3.2.5 Projection module Atlas C4

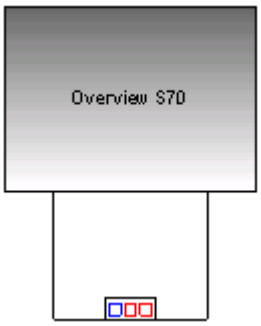


Custom Properties:	**Type of Module**	Atlas C4 (should not be changed)
Data Connection Point (blue):	**VGA_Digital_Input**	Possible to connect with **VGA_Digital_Output** • of digital graphic card • of Hermes D2D • of Hermes V2A
Control Connection Point (red):	**Serial_Input**	Possible to connect with **Serial_Output** of previous device or the control computer
	Serial_Output	Possible to connect with **Serial_Input** of subsequent device

5.3.2.6 Projection module Atlas CS4

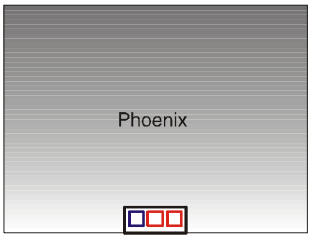
Custom Properties:	**Type of Module**	Atlas CS4 (should not be changed)
	Address	Input a value between 1 ... 255
Data Connection Point (blue):	**VGA_Analog_Input**	Possible to connect with • **VGA_Analog_Output** of analog graphic card • **DVI_Analog_Digital_Output** of AGX graphic card • analog video / RGB signal
Control Connection Point (red):	**Serial_Input**	Possible to connect with **Serial_Output** of previous device or the control computer
	Serial_Output	Possible to connect with **Serial_Input** of subsequent device

5.3.2.7 Projection module S70



Custom Properties:	**Type of Module**	S70 (should not be changed)
	Address	Input a value between 1 ... 255
Data Connection Point (blue):	**VGA_Analog_Input**	Possible to connect with • **VGA_Analog_Output** of analog display adapter • **DVI_Analog_Digital_Output** of AGX graphic card • analog video / RGB signal
Control Connection Point (red):	**Serial_Input**	Possible to connect with **Serial_Output** of previous device or the control computer
	Serial_Output	Possible to connect with **Serial_Input** of subsequent device

5.3.2.8 Phoenix DX Projector



Custom Properties:	**Type of Module**	Phoenix (should not be changed)
	Address	Input a value between 1 ... 255
Data Connection Point (blue):	**VGA_digital Input**	Possible to connect with • **VGA_Digital_Output** of graphical card • **DVI_Analog_Digital_Output** of AGX graphic card
Control Connection Point (red):	**Serial_Input**	Possible to connect with **Serial_Output** of previous device or the control computer
	Serial_Output	Possible to connect with **Serial_Input** of subsequent device

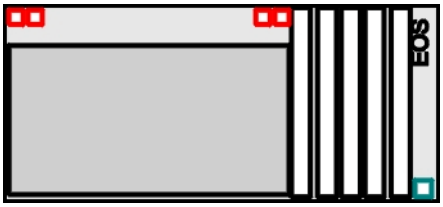
5.3.2.9 Hermes D2D (obsolete)

Data Connection Point (blue):	**VGA_Digital_Input**	Possible to connect with **VGA_Digital_Output** of digital display adapter
	VGA_Digital_Input	Possible to connect with **VGA_Digital_Output** of digital display adapter
	VGA_Digital_Output	Possible to connect with **VGA_Digital_Input** of projection module
Control Connection Point (red):	**Serial_Input**	Possible to connect with **Serial_Output** of previous device or the control computer
	Serial_Output	Possible to connect with **Serial_Input** of subsequent device

5.3.2.10 Hermes V2A (obsolete)

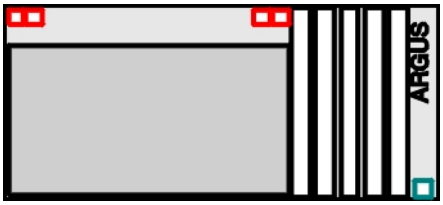
Data Connection Point (blue):	**VGA_Digital_Input**	Possible to connect with **VGA_Digital_Output** of digital display adapter
	VGA_Analog_Input	Possible to connect with analog video / RGB signal
	VGA_Digital_Output	Possible to connect with **VGA_Digital_Input** of projection module
Control Connection Point (red):	**Serial_Input**	Possible to connect with **Serial_Output** of previous device or the control computer
	Serial_Output	Possible to connect with **Serial_Input** of subsequent device

5.3.2.11 Control Computer Eos (obsolete)



Custom Properties	**Name**	Enter the name of the computer in the network. Do not specify an IP address if the name has been defined.
	Reserved COM Ports	Select from the list box the respective number of reserved COM ports (WindowsNT: 4, Windows2000: 2). The COM ports of the serial I/O card then gets the subsequent numbers (3 and 4, or 5 and 6 respectively)
	Number of Viewers	Enter the number of viewers the Apollo project will include. The required communication memory for the Apollo Master/Slave/Client will be calculated accordingly.
	IP Address	Enter the IP address if the computer does not have an assigned name. The name property then remains undefined!
Network Connection Point (green):	**LAN**	Possible to connect to LAN
Control Connection Point (red):	**Serial_Output Com1**	Possible to connect with **Serial_Input** of a device or of the Source Command Enter the corresponding baud rate.
	Serial_Output Com2	Possible to connect with **Serial_Input** of a device or of the Source Command Enter the corresponding baud rate.
	Parallel_Output LPT1	
	Parallel_Output LPT2	
PCI Slots		For PCI boards (I/O serial/parallel cards, analog/digital graphic adapter, AGX card, BigVideo card, QuadVideo card, RGB input card, PCIExt card [connect with a PCI Extender 7 slot or a PCI Extender 13 slot])
Software Container		Apollo Base Desktop Server SNMP Manager SNMP Agent RC Device Command OCM Argus Scan Server TCP Command

5.3.2.12 Control Computer Argus / TransForm A



Custom Properties	**Name**	Enter the name of the computer in the network. Do not specify an IP address if the name has been defined.
	Reserved COM Ports	Select from the list box the respective number of reserved COM ports (WindowsNT: 4, Windows2000: 2). The COM ports of the serial I/O card then gets the subsequent numbers (3 and 4, or 5 and 6 respectively)
	IP Address	Enter the IP address if the computer does not have an assigned name. The name property then remains undefined!
	Number of Viewers	Enter the number of viewers the Apollo project will include. The required communication memory for the Apollo Master/Slave/Client will be calculated accordingly.
Network Connection Point (green):	**LAN**	Possible to connect to LAN
Control Connection Point (red):	**Serial_Output Com1**	Possible to connect with **Serial_Input** of a device or of the Source Command. Enter the corresponding baud rate.
	Serial_Output Com2	Possible to connect with **Serial_Input** of a device or of the Source Command. Enter the corresponding baud rate.
	Parallel_Output LPT1	
	Parallel_Output LPT2	
PCI Slots		For **PCI ExtCard** only, to connect with a TransForm A OmniBus, or with I/O serial/parallel ports
Software Container		Apollo Base Desktop Server SNMP Manager SNMP Agent RC Device Command OCM Argus Scan Server TCP Command

5.3.2.13 Extender 7(PCI Extenderbox 7 slot, obsolete)

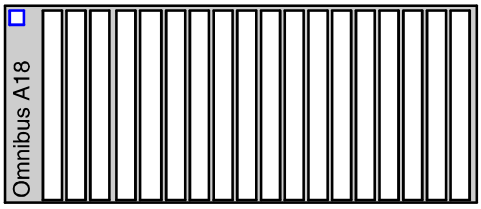
This device is discontinued. Use the PCI Extenderbox 13 instead!

Data Connection Point (blue):	**PCI_Bus**	Possible to connect with **PCI_Bus** of PCI ExtCard in a PCI slot of TRANSFORM A

5.3.2.14 Extender (PCI Extender Box 6+7)

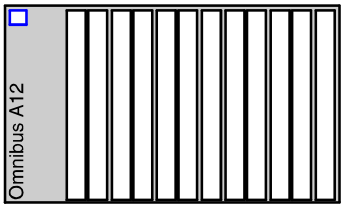
Data Connection Point (blue):	**PCI_Bus**	Possible to connect with **PCI_Bus** of PCI ExtCard in a PCI slot of TRANSFORM A

5.3.2.15 OmniBus A18 (TransForm A OmniBus A18)



Data Connection Point (blue):	**PCI_Bus**	Possible to connect with **PCI_Bus** of Host IF card in a PCI slot of **TransForm A processor.**
PCI slots		For PCI boards (analog/digital graphic adapter, UGX card, OmniScaler, Dual RGB Input Card, Quad Analog Video Card)

5.3.2.16 OmniBus A12 (TransForm A OmniBus A12)



Data Connection Point (blue):	**PCI_Bus**	Possible to connect with **PCI_Bus** of Host IF card in a PCI slot of **TransForm A processor**
PCI slots		For PCI boards (analog/digital graphic adapter, UGX card, OmniScaler, Dual RGB Input Card, Quad Analog

		Video Card)

5.3.2.17 Visu

Only digital Visu is supported by Apollo!

The custom properties of this shape include the parameter setting of the timing. The values can be entered manually or – recommended!- automatically by the system. The automatic values are derived from the position of the resolution switch and the color depth specified on the graphics card.

Manually entered values in the visu properties will overwrite the default values which are related to the resolution switch and color depth.

Custom Properties	**Linux Firmware Folder**	/opt/barcorc/etc/
	Windows Firmware Folder	C:\Program Files\ Barco RC Agent\
	Hardware Handshake	On (special cable required) or Off
	HWHorzPhase	
	HWVertPhase	
	HWColorKeyRed	
	HWColorKeyGreen	
	HWColorKeyBlue	
	HWBackgroundRed	
	HWBackgroundGreen	
	HWBackgroundBlue	
	HWHorzResolution	
	HWVertResolution	
	HWInternalTotalPixelsPerLine	
	HWInternalTotalLinesPerFrame	
	HWOutputTotalPixelsPerLine	
	HWLinePeriod	
	HWHorzSyncWidth	
Connection point	**Serial_input**	From TransForm A or control PC (RS232 in)
Connection point	**Parallel_input**	Parallel output from TransForm A (Reset in)
Connection point	**Parallel_output**	To parallel_input of the following VisuPLUS (Reset out)
Connection point	**Serial_output**	To serial_input of the following VisuPLUS (RS232 out)
Input cards	**Video Input Unit**	Up to 4 input cards per VisuPLUS
Output cards	**Digital Output Unit**	Up to 4 output cards per VisuPLUS

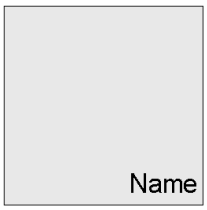
For 15, 16, and 32 bit color depth:

Color values for color key and background color: (RGB) 8, 0, 0

For 8 bit color depth:

Color values for color key and background color: (RGB) 0, 0, 0 or 128, 0, 0

5.3.2.18 Device Group



Custom Properties	**Group Name**	Enter a freely selectable name. Warning: Name may not contain any empty spaces!

5.3.2.19 OVT analog (Analog graphical card, obsolete)

	Data Connection Point (blue):	**VGA_Analog_Output**	PCI board for Eos or PCI Extender Box Possible to connect with **VGA_Analog_Input** of projection module

5.3.2.20 OVT digital (Digital graphical card, obsolete)

	Custom Properties	**Resolution Switch**	Select the appropriate position of the rotary switch from the list box, see table below
		Color Depth	Select the appropriate color depth (8 bit per pixel or 16 bit per pixel)
	Data Connection Point (blue):	**VGA_Digital_Output**	PCI board for Eos or PCI Extender Box Possible to connect with **VGA_Digital_Input** of projection module

switch	projection module	resolution
0	OverView-mL	VGA 640×480
1	OverView-mL OverView-mD	SVGA 800×600 SVGA 800×600
2	OverView-mL	XGA 1024×768
3	(reserved for future use)	
4	OverView-mP AtlasC4 67" with poly-silicon engine	XGA 1024×768
5	OverView-mP OverView-mE	SVGA 800×600 SVGA 800×600
F	analog	software defined

5.3.2.21 AGX Graphic Card (Digital graphical card, obsolete)

	Custom Properties	**Resolution Switch**	Select the appropriate position of the resolution switch from the list box, see table below
		Color Depth	Select the appropriate color depth (8 bit per pixel or 16 bit per pixel)
	Data Connection Point (blue):	**DVI_Analog_Digital_ outpt**	PCI board for TransForm A OmniBus, Eos base unit, Eos Extender Box Possible to connect with **VGA_Digital_Input** or **VGA_Analog_Input** of projection module

switch	projection module	resolution	DDC active
0	OverView-mL	VGA 640×480	no
1	OverView-mL, OverView-mD OverView-mE	SVGA 800×600	no
2	OverView-mL	XGA 1024×768	no
4	OverView-mP, Atlas67C4 (LCD Type D, E)	XGA 1024×768	no
5	OverView-mP; Atlas67C4 OverView-mE	SVGA 800×600	no
6	digital output, 60 Hz VESA timing	SXGA 1280×1024	no
7	OverView-mP, Atlas67C4 (LCD Type F)	XGA 1024×768	no
8	OverView D series, SXGA	SXGA 1280×1024	no
9	Reserved for future use		
F	digital output with DDC connected display device provides DDC information	VGA 640×480 SVGA 800×600 XGA 1024×768 SXGA 1280×1024 UXGA 1600×1200	yes
	analog output (CRT)	software defined	no

5.3.2.22 UGX Graphic Card (4channel graphical card)

	Custom Properties	**Resolution Switch**	Select the appropriate position of the resolution switch from the list box, see table below
		Color Depth	Select the appropriate color depth (8 bit per pixel or 16 bit per pixel)
	Data Connection Point (blue):	**DVI_Analog_Digital_ outpt**	PCI board for TransForm A Possible to connect with **VGA_Digital_Input** or **VGA_Analog_Input** of projection module

switch	projection module	resolution	DDC active
0	OVERVIEW-ML	VGA 640×480	no
1	OVERVIEW-ML, OVERVIEW-MD OVERVIEW-ME	SVGA 800×600	no
2	OVERVIEW-ML	XGA 1024×768	no
4	OVERVIEW-MP, ATLAS67C4 (LCD Type D, E)	XGA 1024×768	no
5	OVERVIEW-MP; ATLAS67C4 OVERVIEW-ME	SVGA 800×600	no
6	digital output, 60 Hz VESA timing	SXGA 1280×1024	no
7	OVERVIEW-MP, ATLAS67C4 (LCD Type F)	XGA 1024×768	no
8	OverView D series, SXGA	SXGA 1280×1024	no
9	Reserved for future use		
F	digital output with DDC connected display device provides DDC information	VGA 640×480 SVGA 800×600 XGA 1024×768 SXGA 1280×1024 UXGA 1600×1200	yes
	analog output (CRT)	software defined	no

5.3.2.23 OmniScaler (TransForm A OmniScaler)

	Data Connection Point (blue):	**DVI_Analog_Digital_ outpt**	PCI board for TransForm A Possible to connect with **VGA_Digital_Input** of projection module; Only in conjunction with UGX Graphic Card in TransForm A Processor or TransForm A OmniBus A18 / TransForm A OmniBus A12

5.3.2.24 BigVideo (obsolete)

	Data Connection Point (blue):		PCI board for Eos or PCI Extender Box or Argus Back-plane Possible to connect with three analog video sources

5.3.2.25 QuadVideo (obsolete)

	Data Connection Point (blue):		PCI board for Eos or PCI Extender Box Possible to connect with four analog video sources

5.3.2.26 RGB-Input Card (obsolete)

	Data Connection Point (blue):		PCI board for Eos or PCI Extender Box or Argus Back-plane Possible to connect with a RGB source to display on projection module and control monitor

5.3.2.27 Quad Analog (Quad Analog Video Card)

	Data Connection Point (blue):		PCI board for TransForm A. Possible to connect with 4 video sources. This input card requires the OmniScaler!

5.3.2.28 Dual RGB Input (Dual RGB Input Card)

	Data Connection Point (blue):		PCI board for TransForm A. Possible to connect with up to 2 RGB sources. This input card requires the OmniScaler!

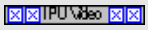
5.3.2.29 Streaming Video Card

	Data Connection Point (blue):		PCI board for TransForm A. Possible to connect up to 4 digital video stream sources This input card requires the OmniScaler!

5.3.2.30 Quad SDI video card

	Data Connection Point (blue):		PCI board for TransForm A. Possible to connect to 4 SDI videos This input card requires the OmniScaler!

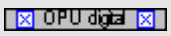
5.3.2.31 Video Input Unit (Visu)

 Data Connection Point (blue):	**Video Input/ Video Output (left)** **SVHS Input/ SVHS Output (right)**	Video Input Card for Visu^{Plus}, Video input on BNC connectors, S-Video input on 4-pin mini-Din connectors, loop through

5.3.2.32 RGB Input Unit (Visu)

 Data Connection Point (blue):		RGB Input Unit for Visu^{Plus}, .

5.3.2.33 Digital Output Unit (Visu)

 Data Connection Point (blue):	**VGA_Digital_Input/ VGA_Digital_Output**	Digital input from the Eos, digital output to the projection module (PanelLink or DVI)

5.3.2.34 PCI Ext Card

	Data Connection Point (blue):	**PCI_Bus**	PCI board for TransForm A Possible to connect with **PCI_Bus** of TransForm A Extender Box or TransForm A OmniBus.

5.3.2.35 Host IF Card (Host interface card)

	Data Connection Point (blue):	**PCI_Bus**	PCI board for Transform A Possible to connect with TransForm A OmniBus A18 and TransForm A OmniBus A12

5.3.2.36 IO card (serial I/O card)

	Serial Interface (rot):	**Serial_Output COM3** **Serial_Output COM4** **Baudrate can be set to 1200/2400/9600/19200/38400**	PCI Card for Eos Includes two additional serial interfaces, e.g. for connecting a Visu Number of COM ports depends on the reserved COM ports on Eos or Argus

5.3.2.37 I/O card Parallel Port

	Parallel Interface (rot):	**Parallel_Output**	PCI Card for TransForm A Includes an additional parallel interface.

5.3.2.38 Data field

Copyright:			Project
Last Edit: 19.11.2003	Page Page-1	Version 1.4.4	Document Context
Filename			Title

This field can not be edited, but displays the information of the file and the file properties entered in the file properties dialog.

Refer to the following table to learn about the relationship

Data field	**File | Properties**
Copyright	Company
Project	Category
Document Context	Topic
Title	Title

Starting with Control Room Configurator 1.4.4, the version of the Control Room Configurator is indicated in the version field.

Please note: the version is only updated when the drawing is saved, exported or printed!

5.3.2.39 Stencils Software.vss

5.3.2.40 Apollo Base

Custom Properties	Function	Set this property to **master**, **slave**, or **client**
	Clock Server	Set this property to true if this controller is to be the clock server for the Apollo system.

It is mandatory that in every Apollo project there is one master defined!

5.3.2.41 SNMP Manager

Custom Properties	**Trap Port**	Enter the number of the **TC Port** to receive traps of the **SNMP agents**

5.3.2.42 SNMP Agent RC

Custom Properties	**Read Community**	Enter **public**
	Write Community	Enter **Barco**
	Type of Agent	**RC**
	Port	Enter the **TCP/IP Port** used to receive commands from the **SNMP manager**

5.3.2.43 Desktop Server

Custom Properties	**Path**	Enter the entire path of the Apollo Database if the database is not local but on any other workstation of the Apollo network

5.3.2.44 Device Command

Custom Properties	none	

5.3.2.45 Argus Scan

Custom Properties	**Path**	Argus Scan only used with the Apollo API

5.3.2.46 Tcp Command

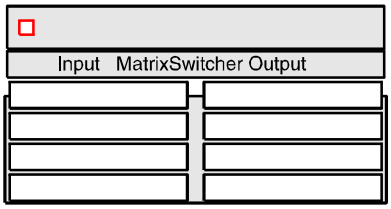
Custom Properties	**Port**	4585

5.3.2.47 OCM

Custom Properties	**Owner**	Barco
	Location	Kuurne
	Password	barco
	SNMP Port	6063
	SNMP Port	4702
	Read Comm	public
	Write Comm	barco

5.3.2.48 Stencils Barco 3rd Party Devices.vss

5.3.2.49 Matrix Switcher



Custom Properties	**Name**	Enter a freely selectable name of the matrix switcher
	Input Switch	Number of Inputs
	Output Switch	Number of Outputs

After entering the required inputs/outputs, the shape is adapted accordingly.

5.3.2.50 Command Source

This shape replaces the shape SerialCommandInterface of previous versions of the Control Room Configurator.

Connection point (red)	Serial input	To connect with COM1 or COM2 of the TransForm A.

This shape defines the entries of the SerialCommandInterfaceBasic.ini – file: baudrate and port!

If the project includes the Command Source, but there is no file SerialCommandInterface.ini in the project folder yet, then a sample file will be copied to this folder when quitting the Apollo Settings dialog. This sample file then has to be edited and adjusted according the specific requirements, cf. Customizing configuration files.

5.3.3 Generating configuration files

In order to generate the configuration files the entire Display Wall and its control system has to be created as a Visio plan based on the **Control Room Configuration** template.

Correct configuration files can be created only if all utilized hardware and software components are included in the configuration plan!

Make sure individual devices are properly connected!

Use the **Device Group** template to create a hierarchical device structure.

Use **Device Group** as well to assign a freely selectable name to the Display Wall (of the Apollo project).

The system automatically assigns the **names** of the devices and their **logical addresses.**

Click with the right mouse button on the Visio page and select **Export** from the context menu to create the configuration files.

5.3.4 Copying Configuration Files

When exporting, the sub directories containing the necessary configuration files are added to the folder where the Visio plan is saved

Configuration files for the control computer of the Display Wall are located at
...\FileName_Name of Control Computer

Configuration files for the operator workstations are located at
...\FileName_Name of Operator Workstation

In case of a redundant Apollo System, the configuration files for the master are located at
...\FileName_Name of Master

The configuration files for the slave are located at
...\FileName_Name of Slave

Copy the respective files to the **Apollo Project** directory of the corresponding workstation.

Apollo features a security provider to assign specific permissions to different access user groups. The security provider gets his information from the file AccessGroups.ini which has to be located in a subfolder ServerData in the ApolloProject folder.

The subfolder ServerData and a sample AccessGroups.ini file is created by quitting the Settings Dialog with OK. Then the AccessGroups.ini file can be edited and customized. The modifications will be valid after an additional launching of the Apollo Settings. For more information on the AccessGroups.ini file, please see Defining accessGroups

In case your system comes with an already configured Apollo project, when copying the viso configuration folders, DO NOT copy the file apollo.lic: the license file located in the folders created by Viso is a demo license file which then would overwrite your project license file.

- Copy remotecontrol.ini to the serverdata subfolder
- Copy barcorc.ini to the rcagent installation folder
- Copy OCM configuration xml files to the OCM installation folder

5.3.5 Updating a configuration

Any expansion to an Apollo project (hardware or software component) has to be implemented with the original Visio plan. **Import** the drawing of an existing Apollo Project in the most lately template of the Control Room Configurator. Current configuration files are then recreated using the **Export** function , which are copied to the respective project directory.

Configuration files may not be changed or modified manually!

6 Viewer

6.1 Concept

Viewers are applications running on the display wall with their windows showing different contents such as videos, video text, Internet pages, or applications on different screens or display walls.

A bitmap may cover the entire content of the viewer window (blanking) or information (text and/or logo) can overlay the content at specific positions. Up to 4 so-called "In Display Captions" (IDC) can be defined for each viewer.

While text can be entered freely and as desired, the available bitmaps for the blanking mode and the IDCs are managed for all viewers in the **ServerData\Globals.ini** file**.** Text colors, background colors, and character size are defined in this file as well.

Every viewer can be launched with individual parameters and in several instances. The mandatory **Ident** parameter is used to access and control the respective viewer. The viewer application cannot be launched at all without a specified **Ident** parameter! The **Ident** parameter has to be unique!

Start parameters are either defined in the shortcut or passed via the command line when launching the command line interface.

The optional **Source** parameter defines the actual content of the respective viewer window and can be, e.g., a Web address (Web Viewer), a video source (FRG Viewer), or the name of a client workstation (Cottus Viewer). The viewer application is started with a gray window if the **Source** parameter has not been defined.

The parameters applicable to each viewer are listed with the respective viewer descriptions.

As mentioned above, the respective viewer is controlled with the **Ident** parameter. The properties of an already launched viewer can be modified using the properties dialog box or the command line interface.

The following functions are supported from within all viewer applications:

- Hide/show of viewer window title bar
- Hide/show of viewer window status bar
- Hide/show of actual viewer window content
- Window content overlay with up to 4 informative contents (text and/or logo)

Additional parameters can be controlled depending on the type of viewer.

Settings selected for a viewer are saved in an *.ini file and are applied to the viewer when launched again. Since these configuration settings are not only viewer-specific but also user-specific, these files are saved in the respective user folder (Windows NT: **....\WinNT\Profile\User Name** or. Windows 2000:... **\Documents and Settings\User Name**), using the subfolder **... \Local Settings\Application Data\Apollo**).

6.2 Apollo 1.9 Viewers

Apollo 1.9 features the following viewers:

Name	Depicted Application	Object Type
FRG Viewer	Analog video / RGB sources connected to BigVideo, QuadVideo, RGB input card, QuadAnalog Input card, Dual RGB Input card, or digital video streams connected to Streaming Video Card, or SDI sources connected to Quad SDI Video Card.	Display source
Visu Viewer	Analog video / RGB sources connected to video input units or RGB input units of the Visu	Display source
Cottus Viewer	Screen contents of linked client workstations	Display source
VNC Viewer	Screen contents of linked client workstations, compatible to VNC	Display source
ProViewer (new)	Screen contents of linked client workstations	Display source
Web Viewer	Internet Explorer 5.0	Web source
MPEG Viewer	Digital video	Web source
VTplus Viewer	Video text	TV source

There a three viewers to share the content of a linked client workstations over the LAN. All of them have unique features. The following table gives an overview of the features for each of these viewers:

	Cottus Viewer	Pro Viewer	VNC Viewer
Operating System	MS Windows	MS Windows	Multi OS
Bandwidth Usage	Low*	Medium	High
Response	Synchronous between server and viewer fast scaling	Asynchronous update	Asynchronous update
Connection	One to One One to Many**	One to One One to Many	One to One One to Many
Dynamic region capture	Full desktop	Full desktop Dynamic Region Application Window	Full desktop
Max. Desktop size	8 x XGA 16 bpp 6 x SXGA 16 bpp 4 x UXGA 16 bpp	120 MB	Unlimited
Remote Control	Yes	Yes	Yes
Secure Connection	Yes		
API Support	Full	Full	Full
Record & Playback	Yes**	-	-

* For static applications this can be as low as 20kb/s, for dynamic MS PowerPoint presentations bandwidth can peak to up to 2 Mb/s. Bandwidth usage for the Pro Viewer and VNC viewer will be several times higher than for the Cottus viewer.

** requires Proxy Gateway!

6.3 Limitations

The Control Room Bus does not support more than 255 applications on one computer.

The maximum number of viewers depends on the number of visible IDC's and is about 90-130.

The ProServer is limited to 16 clients. The max. scraping size is 120 MB display memory, cf. 6.6.5 Steps required to configure the ProViewer

Neither ProServer nor VNC Server transfer rubber boxes.

Apollo 1.9 Cottus Viewer is based on Funk Proxy Host 5.1. Recording and playing back sessions are based on the functionality of the Funk Gateway Server 5.1. In case there are recorded sessions of a previous version of Apollo, and you still want to make use of them, contact Barco: The recordings have to be converted to be compliant with Funk Gateway Server 5.1.

6.4 Memory requirements (minimal RAM size)

As already mentioned in the system requirements, every viewer needs about 20-30 MB RAM. Together with the need of the operating systems (200MB) and the base display wall system(100MB), the numbers of viewers define the required memory to be installed in the TransForm A processor.

For screen viewers the resolution of the grabbed desktop has to be taken into consideration as well.

The following table lists the memory requirements of the viewers:

Viewer	memory
FRG Viewer	7 MB
Web Viewer	20 MB
Cottus Viewer	10 MB + target screen resolution
Pro Viewer	10 MB + target screen resolution
VNC Viewer	10 MB + target screen resolution

The target screen resolution of the screen viewers (Cottus Viewer, Pro Viewer, VNC Viewer) result in the below listed additional RAM (approx. values):

Screen resolution	memory
XGA	3 MB
SXGA	5 MB
SXGA+	6 MB
Double SXGA	10 MB
UXGA	8 MB

Please keep in mind that the operating system and the base wall display system contribute with additional 300MB

6.5 Communication memory

Since Apollo Rel. 1.8, the communication memory is automatically set via the viewers specified in the Apollo Configurator, TransForm A shape, custom properties: number of viewers.

As an empiric value, every viewer contributes with 210 kB to the basic requirement of 4096 kB of communication memory.

Depending on the actual Apollo configuration (Master only, Master and Slave) the required memory is calculated and allocated to the Control Room Bus. This is done automatically when making exporting the visio configuration file for the project, provided the correct number of viewers is entered in the shape of the TransForm A master / TransForm A slave/Client workstation.

Let's define N as sum of all viewers of all computers in the project and M as number of viewers of the computer.

In a master only project, the following communication memory is required:

- for the master computer: crbComSize=4096+N*210
- for the client computer: crbComSize=4096+M*210
- for the operator workstation: crbComSize=4096

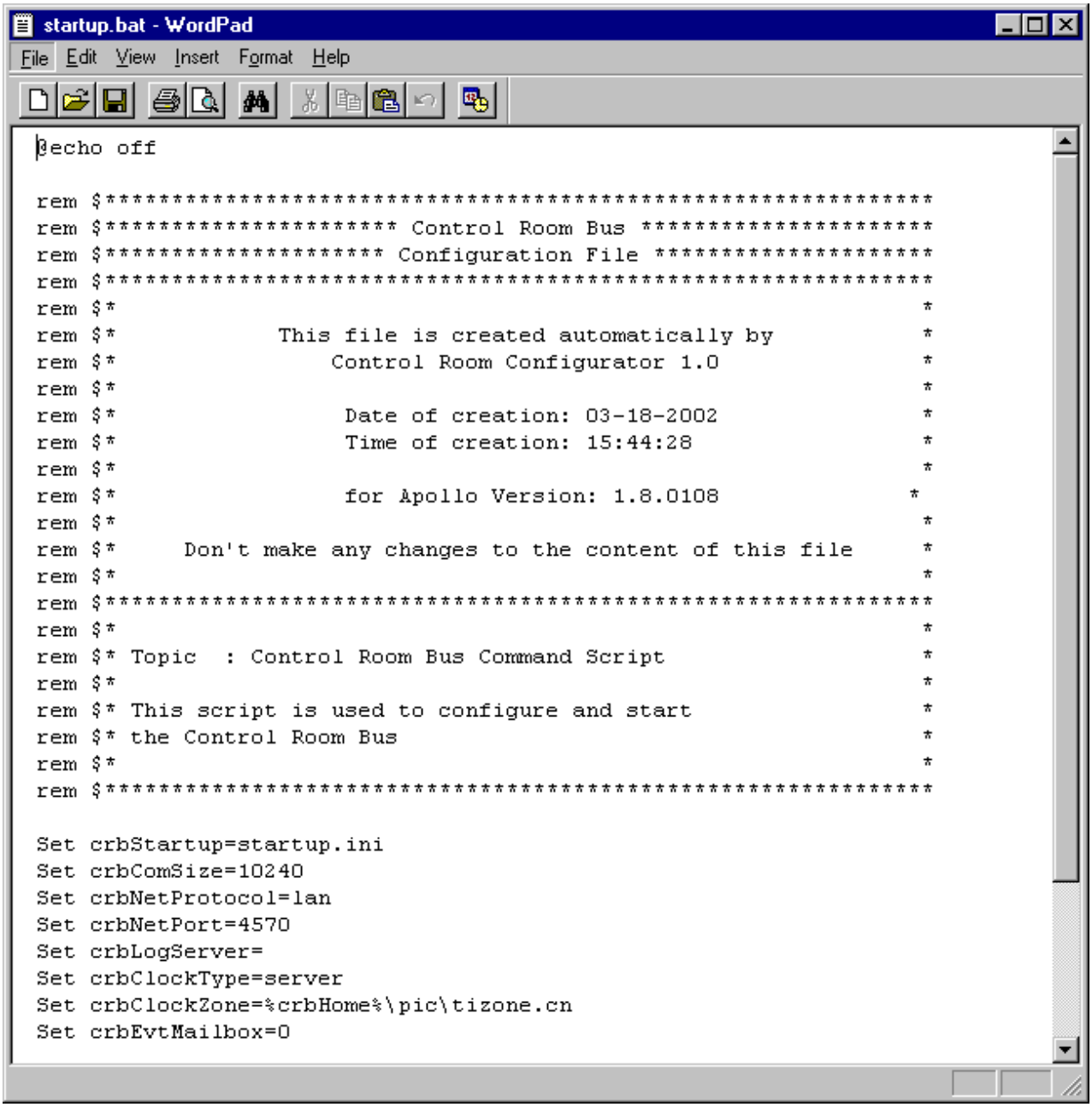
In a master/slave project, the following communication memory is required:

- for the Master and Slave computer: crbComSize=8192+N*420
- for the client computers: crbComSize=4096+M*420
- for the operator workstation: crbComSize=4096

(due to the master/slave configuration, the basic load and the contribution of a viewer is counted twice. Of course the sum of viewers and the number of viewers is the same.)

The more viewers are running, the more communication memory of the Control Room Bus is needed. The size of this memory is defined in the file startup.bat.

The file startup.bat as delivered with the Apollo installation sets the crbComSize to 10240. After the actual configuration of the project via the Apollo Configurator, the crbComSize is adjusted according the actual requirements.


startup.bat - WordPad
File Edit View Insert Format Help
@echo off
rem $***
rem $********************** Control Room Bus *********************
rem $********************** Configuration File *********************
rem $***
rem $*   *
rem $*   This file is created automatically by   *
rem $*   Control Room Configurator 1.0   *
rem $*   *
rem $*   Date of creation: 03-18-2002   *
rem $*   Time of creation: 15:44:28   *
rem $*   *
rem $*   for Apollo Version: 1.8.0108   *
rem $*   *
rem $*   Don't make any changes to the content of this file *
rem $*   *
rem $***
rem $*   *
rem $* Topic : Control Room Bus Command Script   *
rem $*   *
rem $* This script is used to configure and start   *
rem $* the Control Room Bus   *
rem $*   *
rem $***
Set crbStartup=startup.ini
Set crbComSize=10240
Set crbNetProtocol=lan
Set crbNetPort=4570
Set crbLogServer=
Set crbClockType=server
Set crbClockZone=%crbHome%\pic\tizone.cn
Set crbEvtMailbox=0

6.6 Requirements

Several configuration files have to be modified in addition to the required hardware requirements (e.g., **Visu**, **BigVideo Card**, etc.).

The predefined sources for all viewers are specified in the **ServerData\viewersources.ini** file; see The ServerData\viewersources.ini File. A name has to be defined for the video and RGB input cards using the switcher definition file and the switcher language compiler. The sample file **apollo.vsw** is included and may be edited and customized.

The user manual **TransForm A Workstation for Windows NT / Windows 2000** lists detailed instructions for the switcher language compiler.

The **VisuBasicConfiguration.ini** file has to be adapted for the connected **Visu** devices

If the screen content of a workstation is to be depicted on the Display Wall using the **Cottus Viewer** this workstation has to have the software **Proxy Host** of the company Funk Software Inc. installed as well as the host license; see Steps required to configure the Cottus Viewer

The Internet browser Explorer 5.0 has to be installed on the control server of the Display Wall to view Web pages using the **Web Viewer**.

Videotext pages require a video text input card for viewing. Cards of the type Hauppage WinTV PCI are supported.

6.6.1 Steps required to configure the FRG Viewer

The **BigVideo Card**, **QuadVideo Card**, and the **RGB-Input Card** digitalize analog video and RGB signals, which are then displayed and controlled on the display wall using the **FRG Viewer**.

Names have to be assigned to the **TransForm A** input cards. This is done with the help of the switcher definition file.

First, the video hardware configuration (input cards, cables, switcher, etc.) has to be specified in the switcher definition file and written to the registry using the switcher language compiler.

A simple switcher definition file-- **apollo.vsw**-- is located in the directory **Program Files|Barco Apollo|Samples|SLC**. Modify and rename this file for the specific configuration.

If the switcher language compiler is already installed, the required files are located at **C:\Programs\BARCO\SLC** or, if the compiler is not installed in the default folder, in the folder indicated during installation of the compiler. The user manual **TransForm A Workstation for Windows NT / Windows 2000** lists detailed instructions for the switcher language compiler installation.

The file **slc.exe** is the actual compiler reading the switcher definition file and writing the entries into the registry. The other files in the folder contain fixed hardware information and may not be modified.

Line comments are marked with **//** at the beginning of a line; embedded comments start with **/*** and end with ***/**.

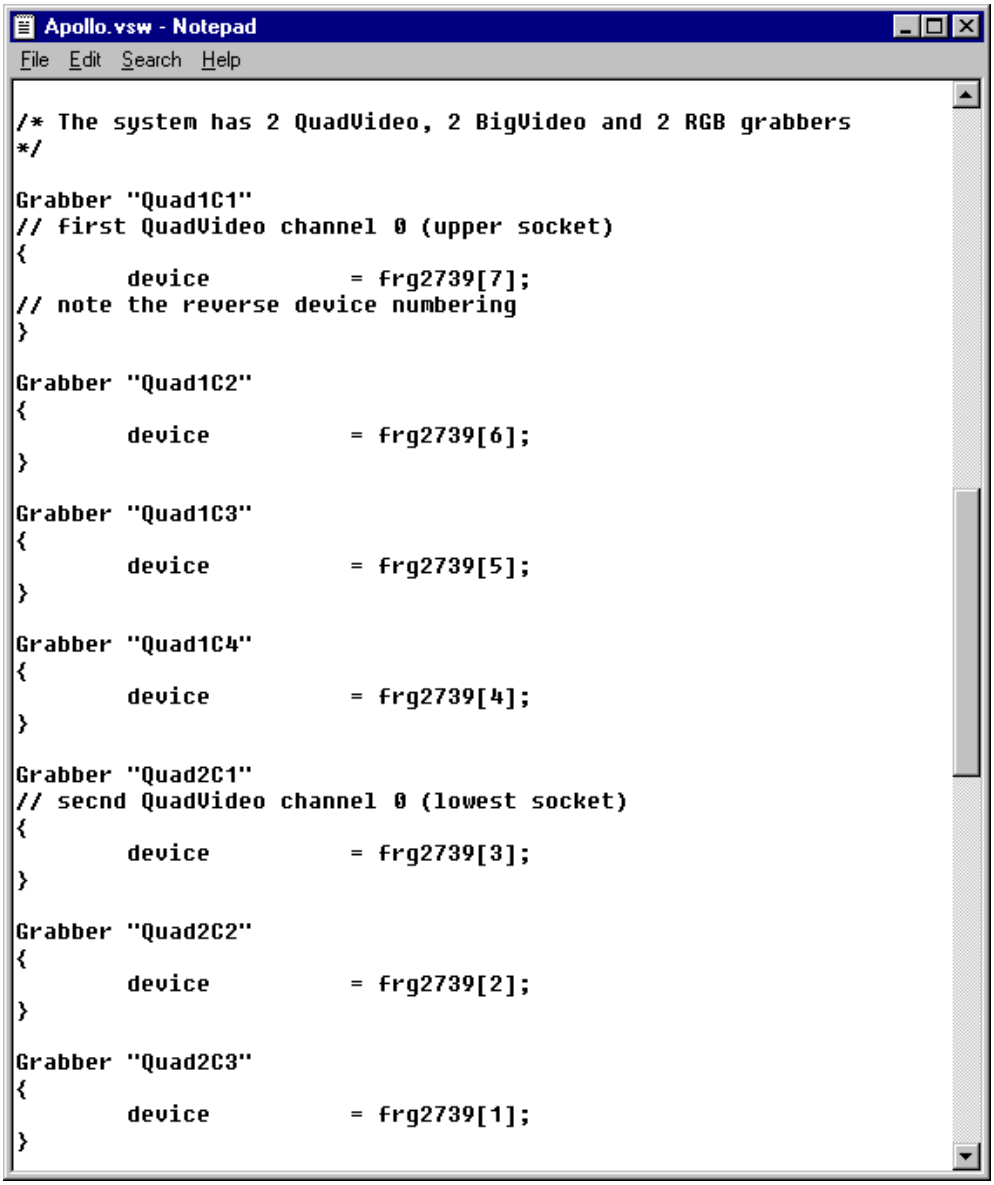
The following hardware assignments apply:

vsw2974[x]	Video switcher (applies to models AutoPatch 1YDM, AutoPatch 1Y-16, AutoPatch 4YDM)
frg2739[x]	QUADVIDEO CARD
frg2684[x]	BIGVIDEO CARD
rgb2774[x]	RGB INPUT CARD, labeled **RGB-2774-0**
rgb2774v1[x]	RGB-INPUT CARD, labeled **RGB-2774-1**
frg3008[x]	Video channels of QUAD ANALOG VIDEO CARD, STREAMING VIDEO CARD, DUAL RGB INPUT CARD
mpg3012[x]	STREAMING VIDEO CARD (for configuration of the board (IP address etc.)

Numbering for every input card type starts with **[0]**. The cards are numbered consecutively according to their order in the PCI slots.

After the switcher definition file has been adapted as needed, the file has to be compiled and data from the file has to be entered into the registry.

Excerpt from a switcher definition file:



This example shows that the name "Quad1C1" is assigned to the first channel of the 1st **QuadVideo Card**. This name is then displayed on the **Source** tab of the **FRG Viewer** property dialog box as the name of the source for the **FRG Viewer**.

Additional properties are assigned to this name in the **ServerData\viewersources.ini** file.

6.6.2 Steps required to configure the Visu Viewer

Visu is a device to display video and RGB sources and is addressed by the **Barco RC Agent** as such.

The tree view of the **Apollo Explorer** also lists this as a device and it has to be an entry in the **RC Agent** as well.

Follow these steps to adjust the **Visu** hardware for Apollo:

- Copy the **Visu firmware files** (located on the Control Room Suite CD-ROM in the folder **RCAgent\RCAgent 1.4.4**) to the directory of the **Barco RC Agent** on the workstation (default path during the installation of the Barco RC Agent is **C:\Program Files\Barco RC Agent**).
- Configure the **Visu** in the Visio file of the ApolloProject and create the required configuration files using the **Export** command. Configuration is done either by specifying the correct position of the resolution switch on the graphic card (recommended) or manually by setting the respective Visu parameters of the Visu shape.

switch	projection module	resolution	DDC active
0	OverView-mL	VGA 640×480	no
1	OverView-mL, OverView-mD OverView-mE	SVGA 800×600	no
2	OverView-mL	XGA 1024×768	no
4	OverView-mP, Atlas67C4	XGA 1024×768	no
5	OverView-mP; Atlas67C4 OverView-mE	SVGA 800×600	no
6	digital output, 60 Hz VESA timing	SXGA 1280×1024	no
F	digital output with DDC connected display device provides DDC information	VGA 640×480 SVGA 800×600 XGA 1024×768 SXGA 1280×1024 UXGA 1600×1200	yes
	analog output (CRT)	software defined	no

- Copy the files to the **ApolloProject** directory.
- Launch the **Apollo Explorer.**
- The **Device** branch has to list the **Visu**.
- Click on the name in the main **Explorer** window (right mouse button). The **Device Manager** opens the dialog box for setting the **Visu** parameters. Check the **Status** entry on the **General** tab. The device has to be ready for operation.
- If necessary, adjust the settings on the dialogs of the **Device Manager**. Write down the new values, since the Visu Basic Configuration file has to be adjusted accordingly.
- Open the Visio configuration file, select the Visu shape, and enter the new values of the parameters.
- Export the configuration, and copy the files to the ApolloProject directory.

Do not modify any of the parameters in the VisuBasicConfiguration.ini!

6.6.3 Steps required to configure the Cottus Viewer

Using the Cottus Viewer, the content of a host workstation can be displayed in one viewer window (peer-to-peer connection) or in multiple viewer windows (gateway based connection).

The **peer-to-peer connection** requires installing the Proxy Host 5.1 by Funk Software on every workstation with a screen to be displayed on the Display Wall.

The **gateway based connection** also requires installing the Proxy Host 5.1 by Funk Software on every workstation with a screen to be displayed on the Display Wall. In addition, Proxy Gateway Server 5.1 of Funk Software has to be installed on at least one workstation as well as the Proxy Gateway Administrator.

The gateway based connection also allows to record and play host sessions.

Sessions recorded with an earlier version than Apollo 1.9 have to be converted to be played back with Apollo 1.9. Contact Barco to convert the sessions!

For every Apollo project, a dedicated license key has to be entered, both for the Proxy Host and for the Gateway Server. The license key of the Gateway Server encodes and respects the number of workstations.

The required installation file and the license key are located on the Apollo CD-ROM in the following directory:

Proxy Host 5.1 by Funk software.	**Apollo (CRS-3045)\Screen Host 5.1**
Proxy Gateway Server 5.1 by Funk software	**Apollo (CRS-3045)\Gateway 5.1**

Both Proxy Host and Proxy Gateway provide an online help which informs about the various options and selections. To make use of this context sensitive help, press the F1 key while having selected the respective control.

The manuals of these applications are also included in the above mentioned folders. It is recommended to carefully read them in order to learn about operation of the software. The functionalities and settings of Funk software are beyond the scope of the Apollo user's manual!

If you want to install Proxy Host and Proxy Gateway Server on one workstation, the Proxy Gateway Server has to be installed first.

6.6.3.1 Installation of the Proxy Gateway Server and/or Proxy Gateway Administrator

The Funk Proxy Gateway has enhanced security features and uses network authentication.

The operating system security policy "Network access: Sharing and security model for local accounts" must be set to "Classic" mode, not "Guest only" mode (WinXP). This policy can be configured in Administrative Tools|Local Security Policy|Security Options.

If this is not set correctly, the installation aborts.

The installation procedure suggest the service to be personalized for the account domain\RemoteControlServer.

Before starting the installation procedure, make sure that this "member" is added to the domain (contact your local IT administrator), or define/select another one.

The Proxy Gateway Server acts as a central communication hub. It also stores and retrieves recordings of previous host sessions.

When installing the Proxy Gateway Server, make sure that the respective workstation provides enough disk space to store host sessions: a typical desktop takes between one and 2 Megabytes per minute.

Therefore it might be recommended to install the Proxy Gateway Server on multiple workstations.

However, in principle it is sufficient to install it once on any workstation of the Apollo network or on TransForm A.

Sessions recorded with Apollo 1.8SR1 or earlier need to be converted. Contact Barco for help!

The Proxy Gateway software runs as a service. The system resources required depend on the number of active Cottus Viewer / host connections that the gateway must support simultaneously, as well as on the bandwidth required by each connection.

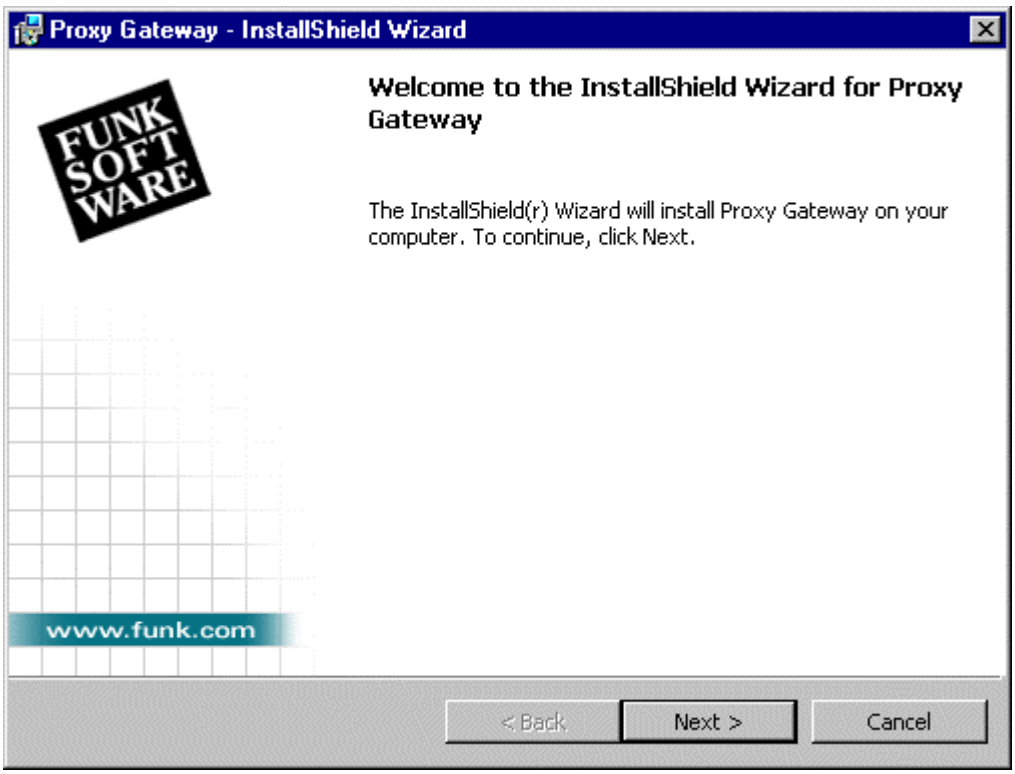
The Proxy Gateway may be installed on the same PC as the Proxy Host.

Before starting installation, make sure that the operating system security policy "Network access" is set to classic mode, and that there is a member domain\RemoteControlGateway or similar.

To install the Proxy Gateway Server, proceed as follows:

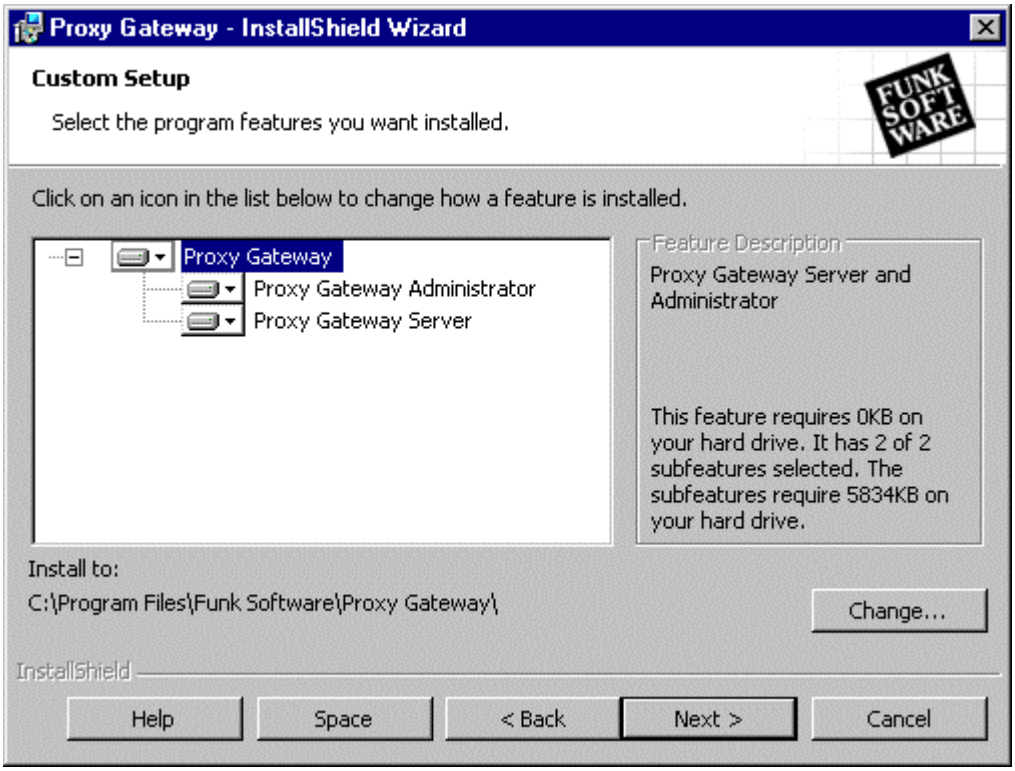
- On the respective computer, log in with administrative privileges.
- Navigate to the respective folder on the Apollo CD-ROM and double click on **setup.exe**.

The installation process starts.

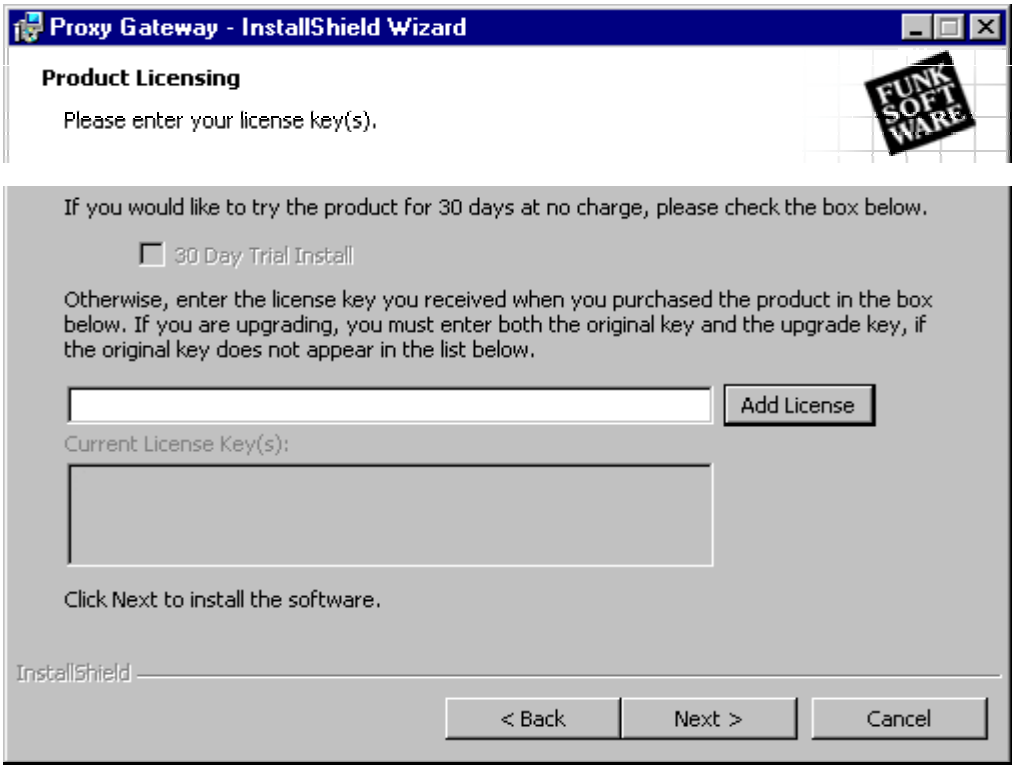

Proxy Gateway - InstallShield Wizard
Welcome to the InstallShield Wizard for Proxy Gateway
The InstallShield(r) Wizard will install Proxy Gateway on your computer. To continue, click Next.
FUNK SOFT WARE
www.funk.com
< Back
Next >
Cancel

Follow the instructions on the screen.

On the next dialog, select the **components** to be installed, Proxy Gateway Server and/or Proxy Gateway Administrator.

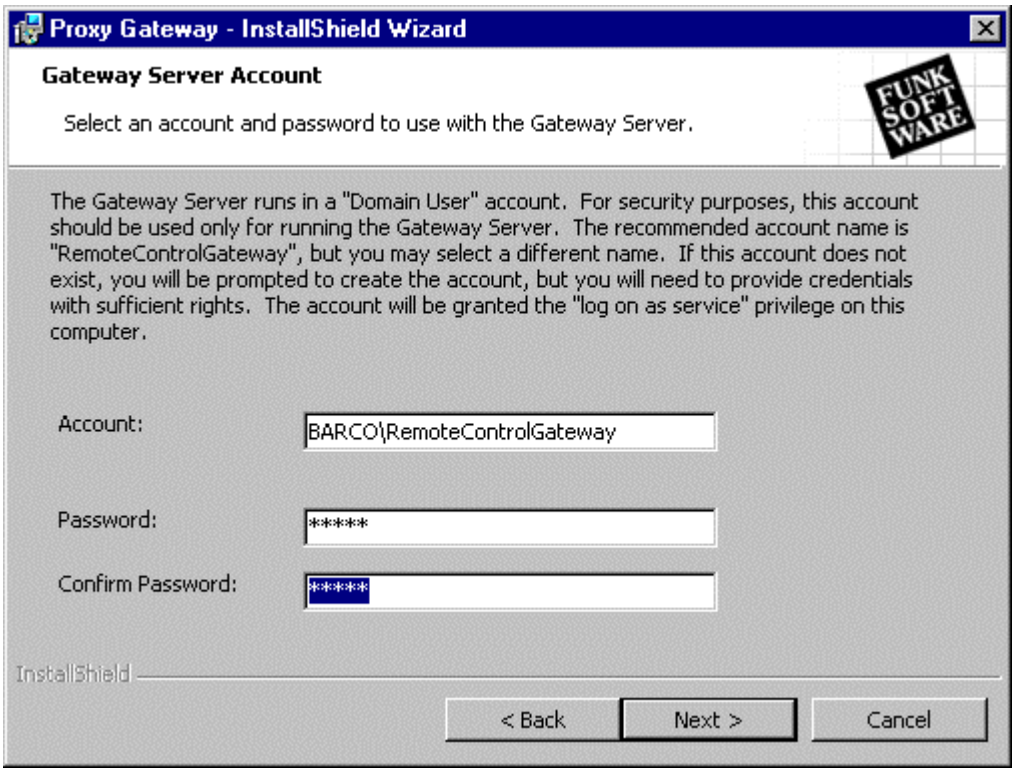

Proxy Gateway - InstallShield Wizard
Custom Setup
Select the program features you want installed.
FUNK SOFT WARE
Click on an icon in the list below to change how a feature is installed.
Proxy Gateway
Proxy Gateway Administrator
Proxy Gateway Server
Feature Description
Proxy Gateway Server and Administrator
This feature requires 0KB on your hard drive. It has 2 of 2 subfeatures selected. The subfeatures require 5834KB on your hard drive.
Install to:
C:\Program Files\Funk Software\Proxy Gateway\
Change...
InstallShield
Help
Space
< Back
Next >
Cancel

When asked for the license key, enter the key provided for your project


Proxy Gateway - InstallShield Wizard
Product Licensing
Please enter your license key(s).
FUNK SOFT WARE
If you would like to try the product for 30 days at no charge, please check the box below.
30 Day Trial Install
Otherwise, enter the license key you received when you purchased the product in the box below. If you are upgrading, you must enter both the original key and the upgrade key, if the original key does not appear in the list below.
Add License
Current License Key(s):
Click Next to install the software.
InstallShield
< Back
Next >
Cancel

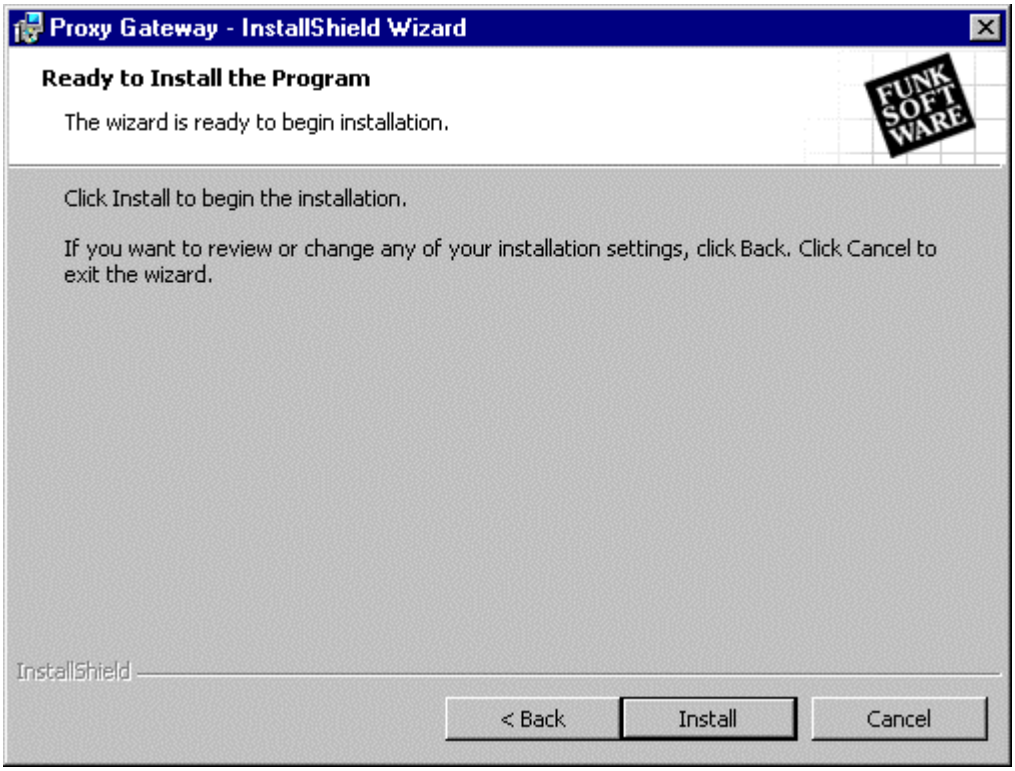
Every Gateway Server requires its own license key!

As mentioned above the Gateway Server runs on a domain user account. The following dialog requires to specify user and password:


Proxy Gateway - InstallShield Wizard
Gateway Server Account
Select an account and password to use with the Gateway Server.
FUNK SOFT WARE
The Gateway Server runs in a "Domain User" account. For security purposes, this account should be used only for running the Gateway Server. The recommended account name is "RemoteControlGateway", but you may select a different name. If this account does not exist, you will be prompted to create the account, but you will need to provide credentials with sufficient rights. The account will be granted the "log on as service" privilege on this computer.
Account:
BARCO\RemoteControlGateway
Password:
******
Confirm Password:
******
InstallShield
< Back
Next >
Cancel

This domain user account is used by Proxy to identify the Gateway server when it connects to computers running Proxy Host. You can use the same domain user account for all Gateway servers you install on your network. When you name the domain user account RemoteControlGateway , you can facilitate the configuration of computers running Proxy Host for Gateway Server-managed connections. If you set up Proxy Gateway Server with another user account, you must configure full access rights for this account for every copy of Proxy Host you intend to use with your Gateway server.

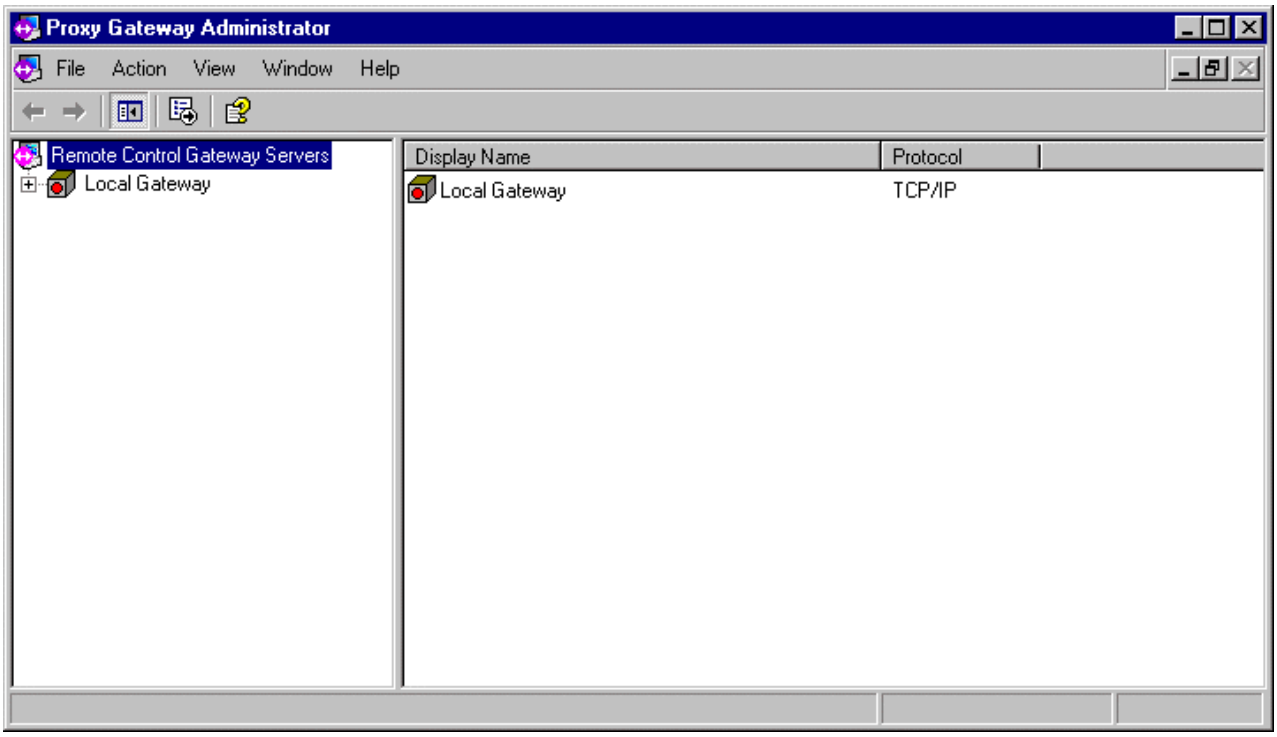
Then the program is going to be installed.


Proxy Gateway - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
FUNK SOFT WARE
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

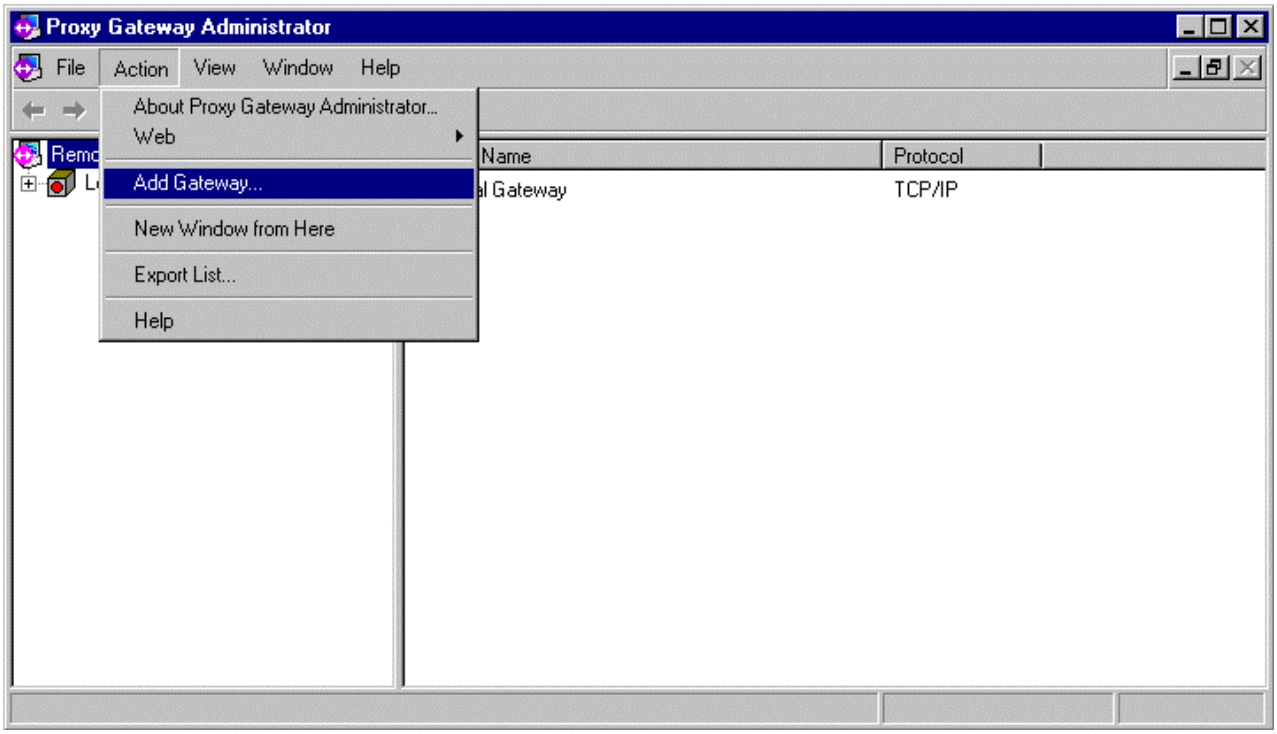
6.6.3.2 How to configure the Proxy Gateway

Configuration of the Proxy Gateway is done via the Proxy Gateway Administrator program.

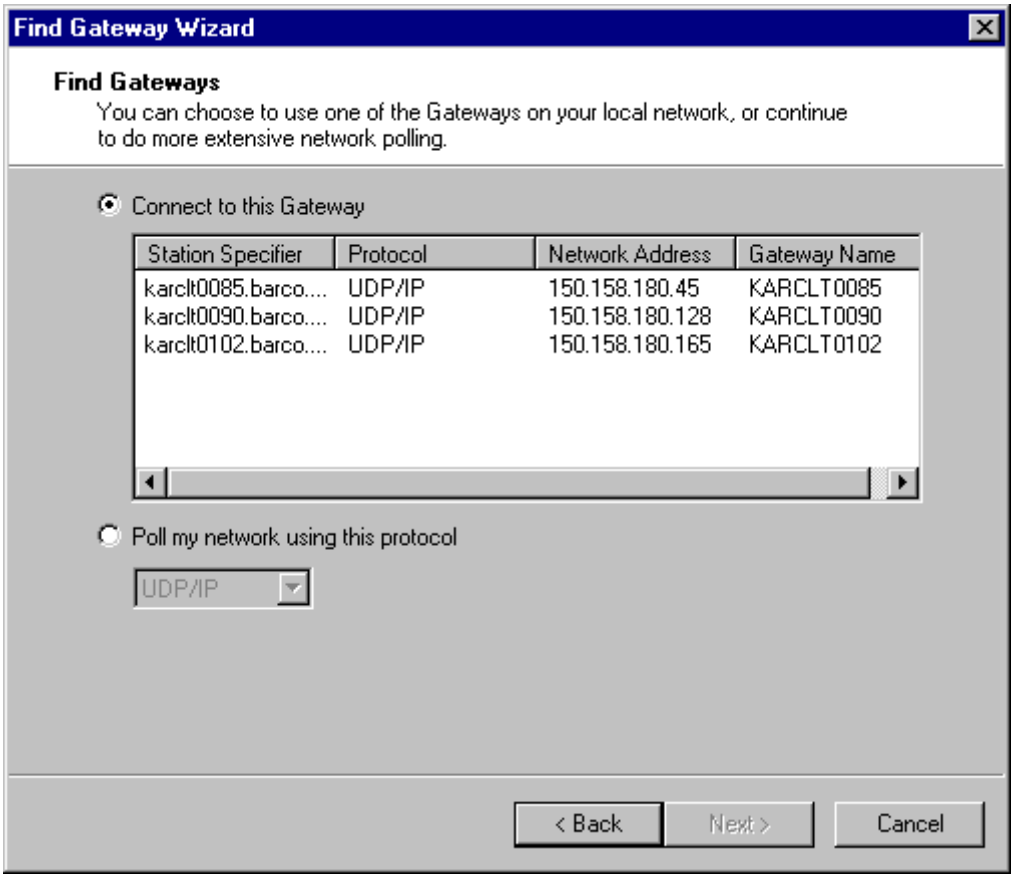
Select **Start|All Programs|Funk Software|Proxy|Proxy Gateway Administrator**.



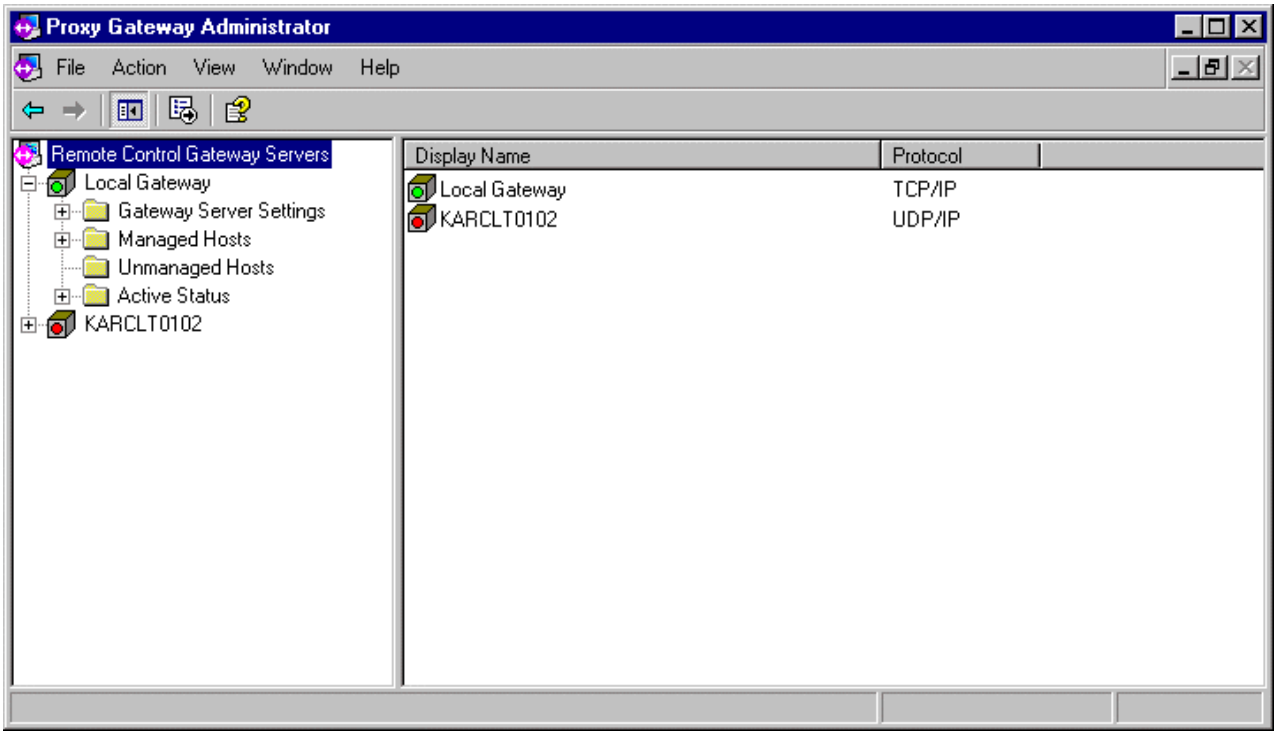
You can use this tool to configure all Proxy Servers in your network. Select View|Add Gateway to invoke the wizzard to search your network for Gateway Servers:



Click next on the wizzard dialog to start polling the network for gateway servers.


Find Gateway Wizard
Find Gateways
You can choose to use one of the Gateways on your local network, or continue to do more extensive network polling.
Connect to this Gateway
Station Specifier
Protocol
Network Address
Gateway Name
karclt0085.barco.... UDP/IP 150.158.180.45 KARCLT0085
karclt0090.barco.... UDP/IP 150.158.180.128 KARCLT0090
karclt0102.barco.... UDP/IP 150.158.180.165 KARCLT0102
Poll my network using this protocol
UDP/IP
< Back
Next >
Cancel

The gateway server selected will be added as node to the tree view of Remote Control Gateway Servers:

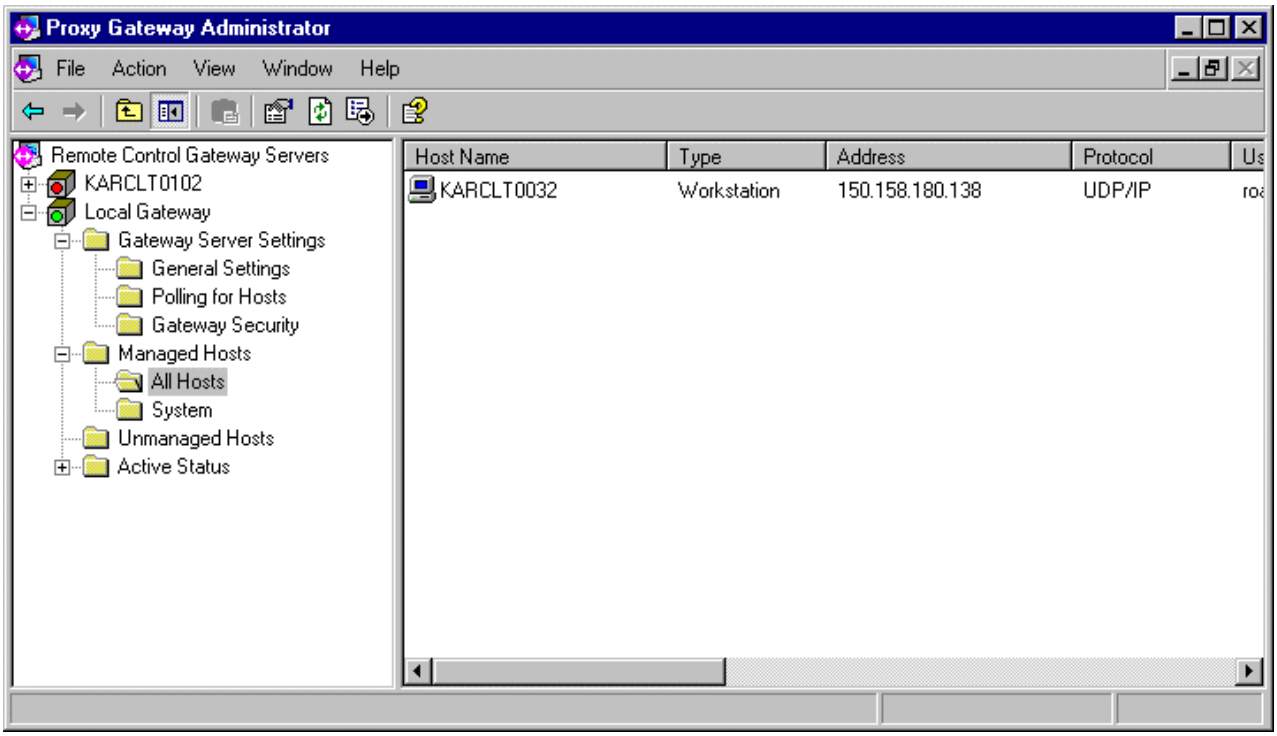


In the tree view, select the gateway you want to administer.

For further information about the configuration settings, please see the manual about the Proxy Gateway Server supplied on the Apollo CD-ROM.

At this place just some basic statements:

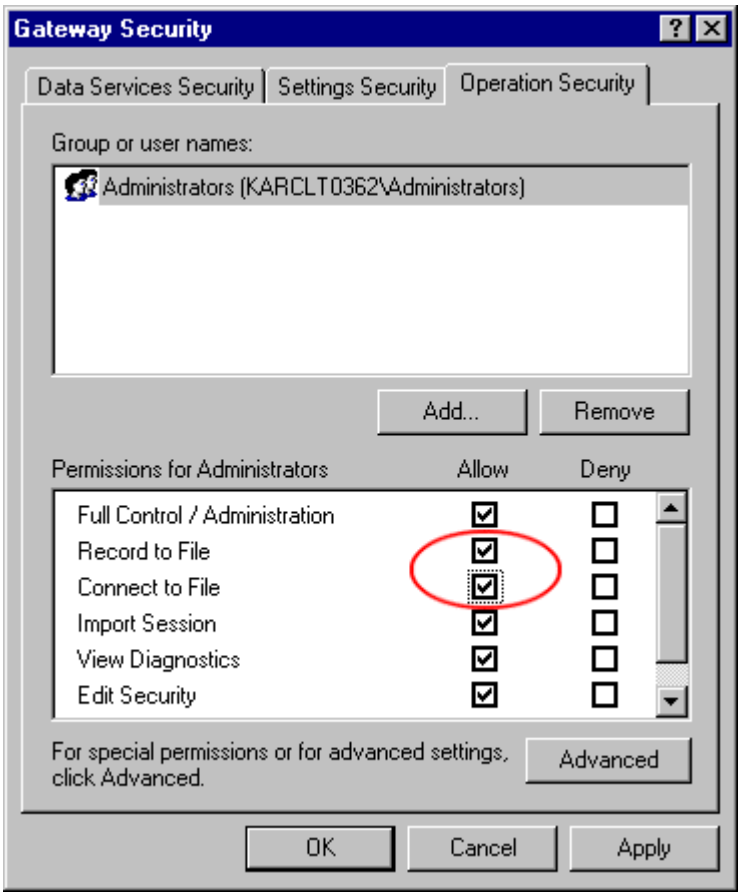
A host workstation detected by the gateway polling for hosts usually will be added to the list of hosts located in the folder **Unmanaged Hosts**. Drag it into the folder **Managed Hosts** to control it via the gateway.



The number of managed hosts a gateway server can deal with is encrypted in the license!

Adjust the **Gateway Security** for Data services, settings and operation. Allow the desired permission to an existing user group and/or define a new user group.

In case sessions are to be recoeded and played, handling of the files is easier if they have a user friendly name indicating the content/use of the session. User friendly names require to check the options **Record to File** and **Connect to File**!



Check the entries on the dialog **Gateway Server Settings|General Settings**. In case on a workstation both, the Proxy Gateway and the Proxy Host are installed, the IPX protocol can only be assigned to one of them. For Apollo, however, it is the IP protocol which is used!

Only the IP Protocol is used!

The gateway is also specified in the viewersources.ini file! Please refer to Cottus Viewer source specification

6.6.3.3 Installation of the Proxy Host

If you want to install Proxy Host and Proxy Gateway Server on one workstation, the Proxy Gateway Server has to be installed first.

Proxy Host has to be installed on every workstation which desktop has to be displayed via the Cottus Viewer.

Follow these steps to install Proxy Host:

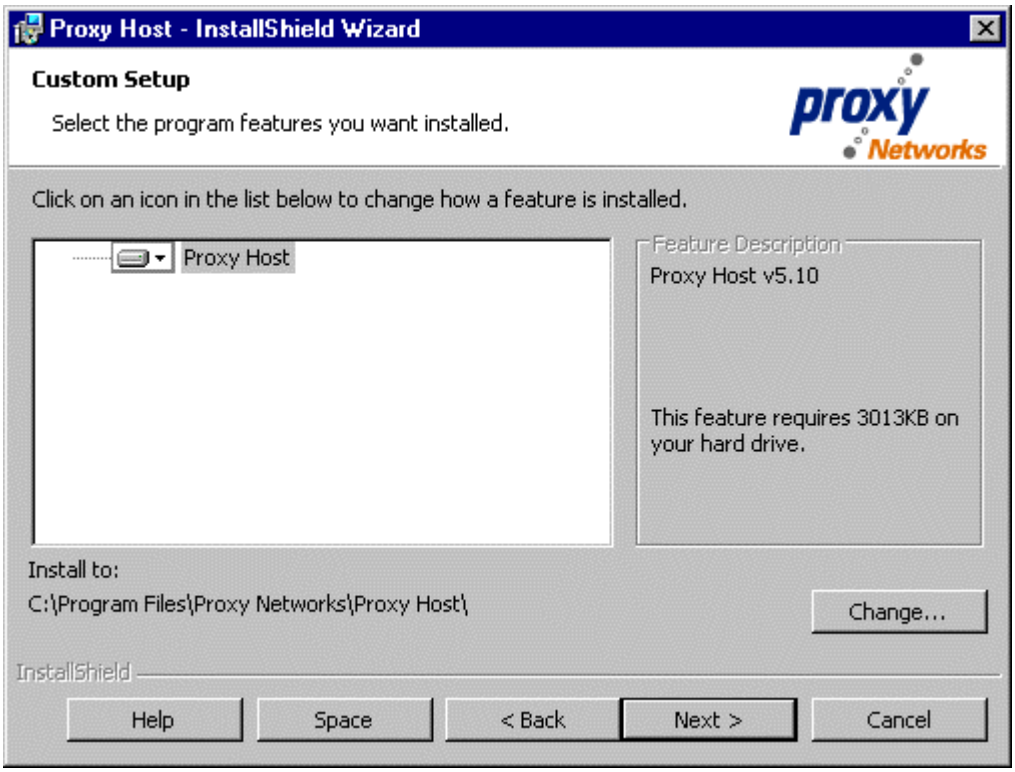
- Log into the host workstation with administrative privileges.
- On the Apollo CD-ROM, click on the Link **Screen Host**

or

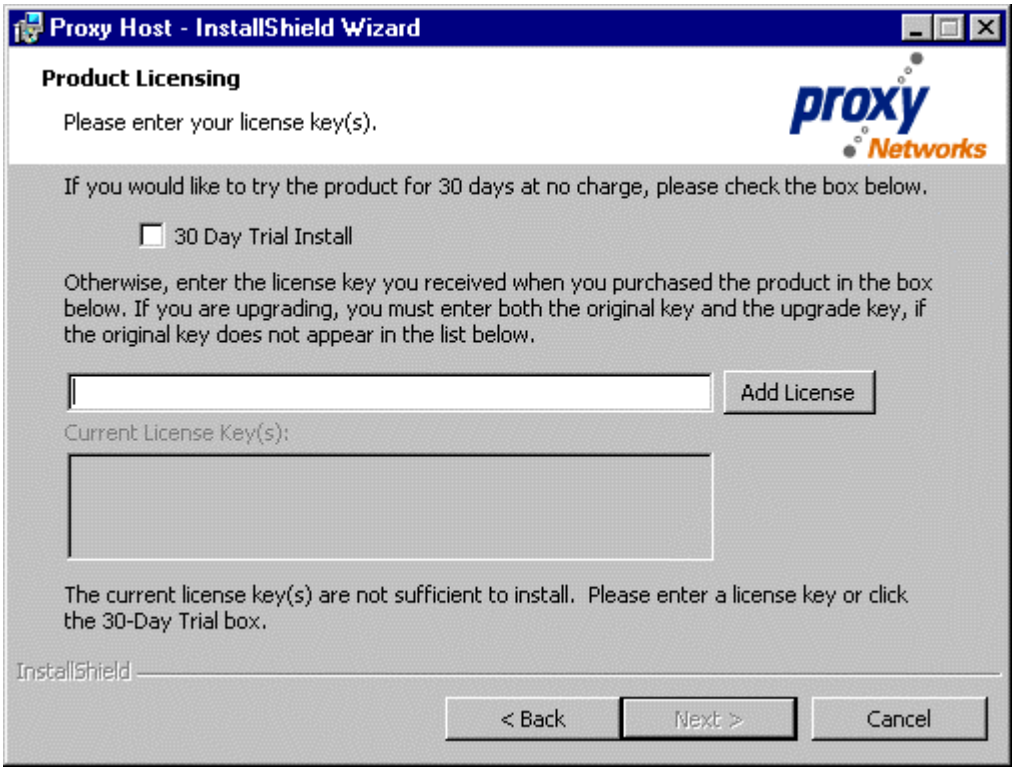
- Open the Windows Explorer and navigate to the following directory on the Apollo CD-ROM **Apollo (CRS-3045)\Screen Host 5.1**
- Double-click on **setup.exe**.

The setup process starts.

Follow the onscreen instructions.



The license key is specific for every project. In case no valid key exists yet, check the option "30 Day TrialInstall". A valid license key can be entered afterwards without the need of re-installation.

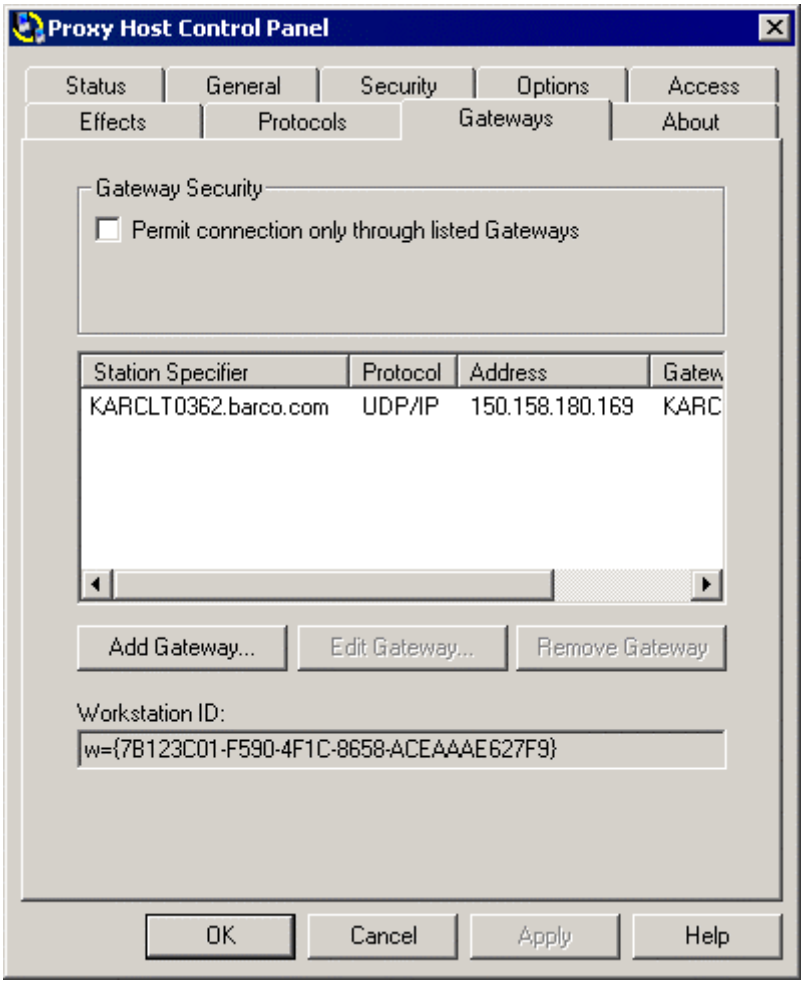

Proxy Host - InstallShield Wizard
Product Licensing
Please enter your license key(s).
proxy Networks
If you would like to try the product for 30 days at no charge, please check the box below.
30 Day Trial Install
Otherwise, enter the license key you received when you purchased the product in the box below. If you are upgrading, you must enter both the original key and the upgrade key, if the original key does not appear in the list below.
Add License
Current License Key(s):
The current license key(s) are not sufficient to install. Please enter a license key or click the 30-Day Trial box.
InstallShield
< Back
Next >
Cancel

Continue the setup process.

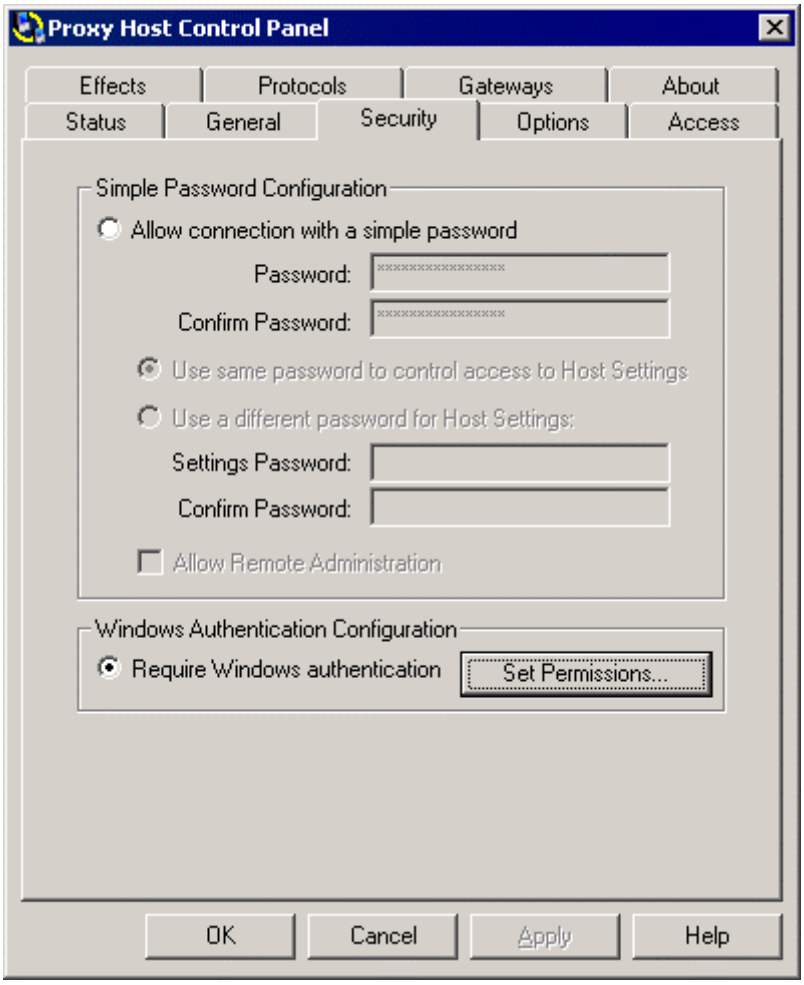
The host computer has to be rebooted once the setup process is finished.

Select Start|Programs|Proxy Networks|Proxy|Proxy Host Control Panel to configure the host workstation.

If the workstation wants to make use of the gateway functionality, the gateway has to be registered! Registration is done in the Proxy Host Control Panel (Start|Programs|Proxy|Proxy Host Control Panel, Gateways tab)



On the Security tab you can choose between a simple password configuration and the Windows authentication configuration. If the later is selected, the respective permissions have to be allowed. In case password configuration is selected, the password has to be entered when launching the Proxy Host Control Panel.



6.6.4 Steps required to configure the VNC Viewer

The VNC Viewer supports the VNC 3.3.7 protocol or the TightVnc 1.2.9 protocol.

On the host workstations, VNC 3.3.7 or TightVnc 1.2.9, respectively, has to be installed. Since VNC supports Windows, Linux, and Apple Macintosh, no VNC software is provided on the Apollo CD-ROM. Please install and configure the VNC server on the host workstation according your operating systems and needs.

It is mandatory that the color depth of the host workstation matches the color depth of the client workstation. In case the color depth differs, those colors which are only present in the color model with the higher color depth are displayed black!

6.6.5 Steps required to configure the ProViewer

The ProServer has to be installed on every host workstation with a screen to be displayed on the Display Wall. Select ProServer when installing Apollo, cf. Setup.

The best color depth for the ProServer wrt performance is 32Bit. However depending on the desktop resolution, it might be mandatory to set the color depth to 16Bit: there is a limitation of max. 120 Mbyte display memory!

In case the max. display memory is exceeded, the error in the ProServer log file reads: "Failed to create memory bit map: error = 8

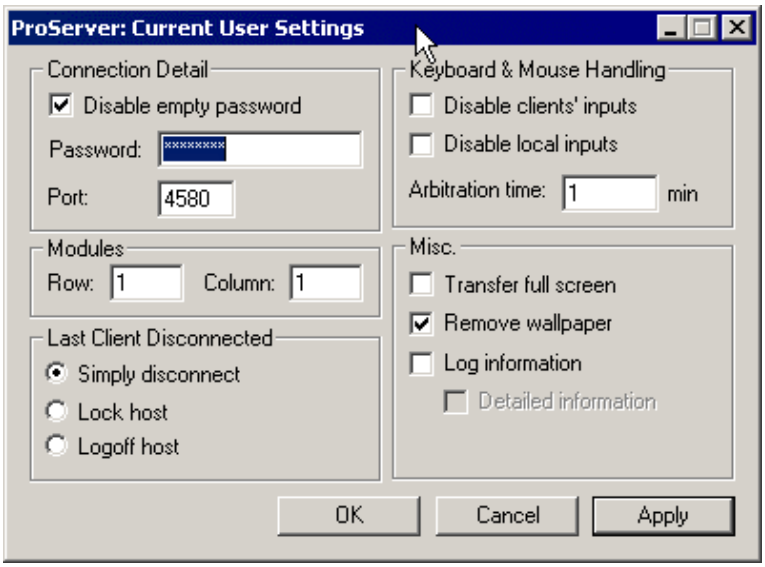
To resolve this problem, reduce the color depth of the desktop!

- Log into the host workstation with administrative privileges.
- Place the CD into the CD drive and run **setup.exe**. The Install Shield Wizard will guide you through the installation process. Select **Custom**, and then **ProServer**. Follow the displayed instructions.

After the installation of the ProServer, it has to be configured. If it is unconfigured, the following warning pops up:

ProServer Error
WARNING : This machine has no default password set. ProServer will present the Default Properties dialog now to allow one to be entered.
OK

After accepting, the configuration dialog is displayed:



It is highly recommended to enter a password and NOT to remove the check mark in the Disable empty password box.

Enter the desired password. This password can freely be assigned. It is not the Windows password!!

If the default port is already used by other applications, enter a different one. Please refer also to the system requirements to see all default ports used by Apollo, cf. Used ports

If a different port is used, on every computer running ProViewer/Remote Pointer the environment variable has to be defined with this port!

Environment variable ApolloProServerPort = <port>.

Enter the configuration of the display. This information will be used to show a representative mini display in the Scraping Layout frame on the **ProViewer|Aspect** tab to interactively define a region to be scraped.

Select the desired behavior when the last client has been disconnected. Default setting is **Simply disconnect**.

Define Keyboard and Mouse handling, and specify the **arbitration time**: To a host computer, only one client can connect, then the host is locked for all other clients. In case the client does not give any inputs on the host during the arbitration time, an other client is allowed to connect to the host.

It is recommended to remove the wallpaper (**remove wallpaper**).

In case update problem occur when scraping the desktop of certain applications (e.g. Java applications), check the option **Transfer full screen**. This will enhance updating the screen, however the CPU load will be much higher.

To change the configuration, right click on the ProServer Icon on the system tray and select properties.

6.6.6 Steps required to configure the Web Viewer

The Web Viewer requires no additional configuration steps except for the predefinition of Internet addresses.

6.6.7 Steps required to configure the MPEG Viewer

The Mpeg Viewer requires no additional configuration steps except for the predefinition of source addresses. The viewer makes use of Windows Media Player and supports Media Player 9 (included on the Windows TransForm A System Kit (TASK). Media Player 9 comes already installed on a TransForm A hard disk. All video formats and codecs of Media Player 9 are supported.

6.6.8 Steps required to configure the VTplus Viewer

A videotext card has to be installed in order to use the **VTplus Viewer**. Apollo supports video text cards such as Type WinTV PCI by Hauppage.

This video text card is not a component offered by the Barco Control Rooms product range.

6.7 Launching Viewer

Viewer require the **Ident** parameter which has to be defined when creating a **shortcut**. By means of this shortcut, viewers can be launched in different ways.

- The **shortcut** is defined in the **Layout Database**. In the Apollo Explorer, click on the **Start** button in the taskbar and then double click on the **shortcut**.
- The **shortcut** is part of a layout: The **viewer** launches as soon as the corresponding layout is activated
- The **shortcut** is directly on the Display Wall. Double click on it to launch the **viewer**.
- The **shortcut** is executed by means of the **DesktopCmd.exe** (e.g. "C:\Program Files\Barco Apollo\Program\DesktopCmd.exe– -name:Server -Shortcut:"HTML Viewer 1")

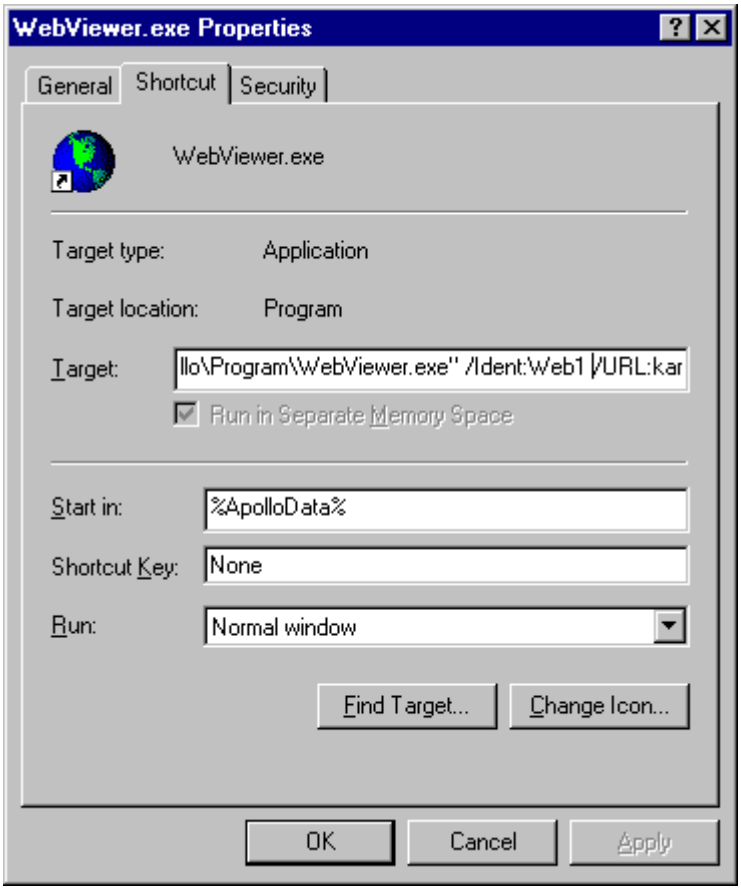
To reduce the time for launching the FRG viewer, it is recommended to invisible preload these viewers and then switch them to visible on demand.

6.7.1 Creating shortcuts

When creating a shortcut for a viewer application, make sure that the **Ident** parameter is defined as well. The other parameters are optional.

Enter the environment variable **%ApolloData%** into the **Start in** field as input.

The following example shows the properties dialog box of a **Web Viewer** shortcut:



The **Ident** parameter is mandatory (here: Web1) used to control the viewer. Additional parameters may be added.

The parameters are listed in Viewer command Interface

6.8 Controlling Viewers

Viewers are controlled via the command interface (Viewer command Interface) or their **Properties dialog box**.

Open the properties dialog box of the viewer

- directly on the Display Wall using the shortcut key combination **CTRL+ALT+Enter**

or

- using the viewer's **context menu** (right mouse click on viewer name) in the Apollo Explorer, viewer category
- or double click on the mini window of the viewer in the Apollo Explorer

The properties dialog box of all viewers has several tabs. These are described together with the corresponding viewers.

Starting with Apollo 1.8, the time interval for reconnection to a source can be set via command line. Default value is 30sec. This parameter cannot be set via the GUI!

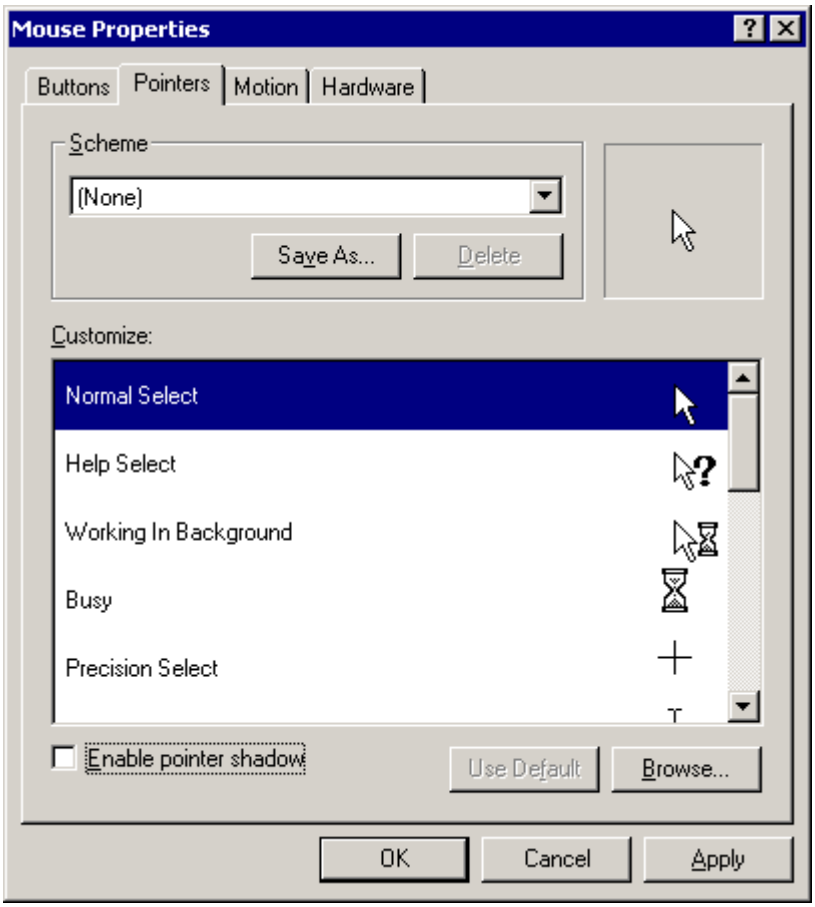
6.8.1 FRG Viewer

Use the **FRG Viewer** to view analog videos and RGB sources as well as digital video streams connected via one of the input cards of TransForm A controller.

The viewer window does not contain any menu or tool bars. Viewers are controlled via the command interface (cf. Viewer command Interface) or the **Properties dialog box**.

Follow these steps to see the mouse cursor on the video:

- Select **Start|Settings|Control Panel|Mouse**
- Activate the **Pointers** tab
- Deactivate the **Enable Pointer Shadow** option



6.8.1.1 FRG Viewer properties dialog box

Open the properties dialog box of the viewer

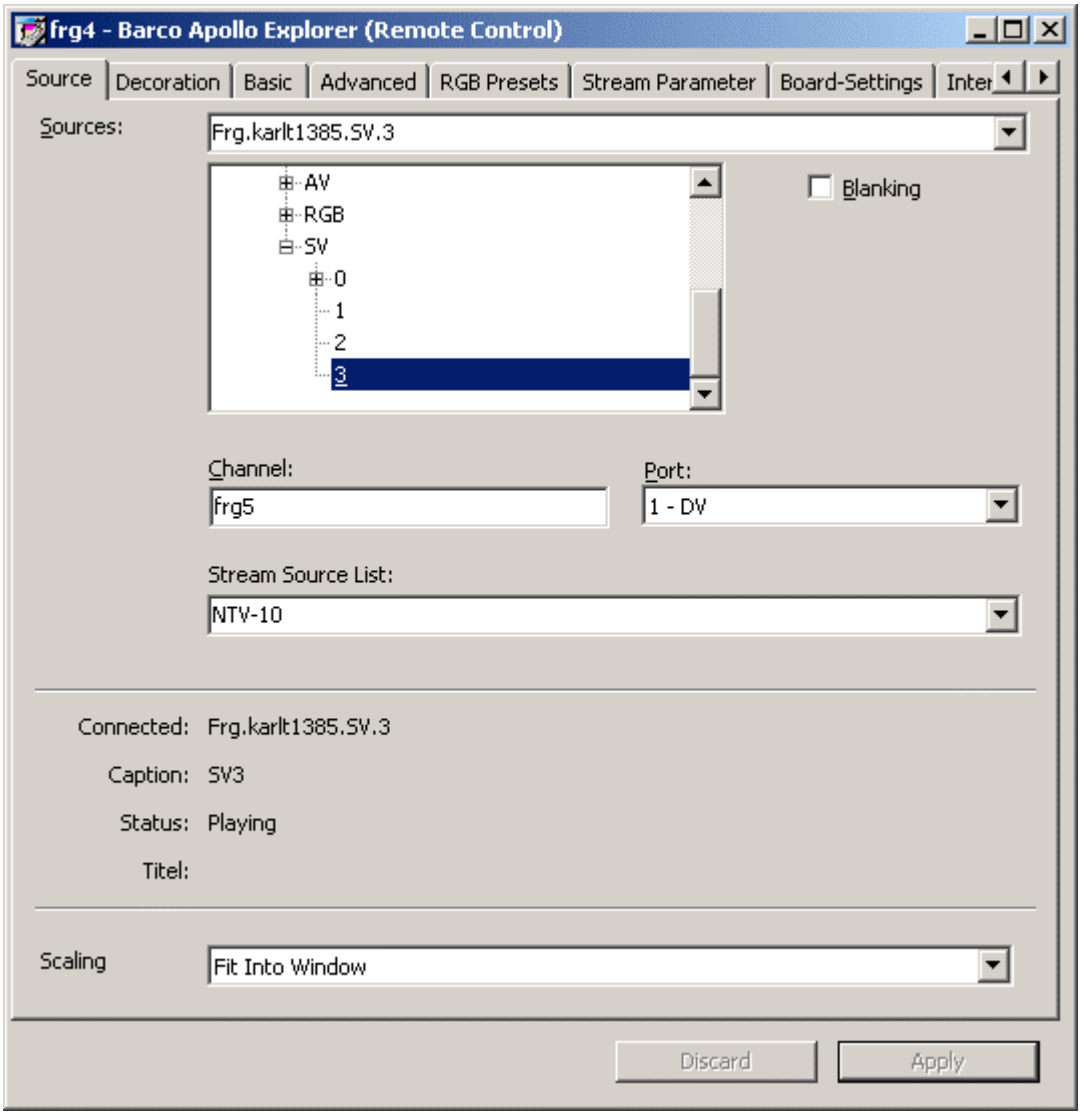
- directly on the Display Wall using the shortcut key combination **CTRL+ALT+Enter**

or

- using the viewer's **context menu** (right mouse click on viewer name) in the **Apollo Explorer**, viewer category.

Close the dialog box with the shortcut key **Alt+F4** or by click on the **Close** button in the title bar.

With 10.000 configured DigitalStreamSources it takes several seconds to open/close the remote control property page.



A simple mouse click on the **Source** tab selects a video source from a predefined list of sources.

The video sources listed in the selection list are defined in the ServerData\viewersources.ini file.

If a name has been assigned to this source, **SourceConnected** displays this name. **SourceCaption** shows the description entered in the **ServerDate\viewersources.ini** file.

An assigned title is depicted next to **Title**. **Status** refers to the status of the link with the source.

Select from scaling options: original resolution (**native size**), optimized (**best fit, preserve aspect ratio**) while maintaining aspect ratio (distortion-free), or **fit into window** (aspect ratio and resolution are not preserved).

The **Channel** field shows the name of the input card selected on the **Source** tab. The **Port** associated with this source is listed as well.

If it is a non-predefined input card, the **Port** has to be selected. The 4 pole mini-DIN connectors of the **BigVideo Card** or **QuadVideo Card** allow connecting 2 composite signals or 1 S-Video signal. By means of the **Port**, the kind of signal is specified (Composite1, Composite2, S-Video).

Port 0 always indicates the Off state.

The analog input cards have the following ports:

	Signals	**Number of Ports**	**Port Allocation**
BigVideo Card 3x 4pole mini-DIN	1 (out of three)	9	**1**: Connector 1, Composite1 **2**: Connector 2, Composite1 **3**: Connector 3, Composite1 **4**: Connector 1, Composite2 **5**: Connector 2, Composite2 **6**: Connector 3, Composite2 **7**: Connector 1, S-Video **8**: Connector 2, S-Video **9**: Connector 3, S-Video
QuadVideo Card 4x 4pole mini-DIN	4x 1	3	**1**: Composite1 **2**: Composite2 **3**: S-Video
RGB-Input Card 1xVGA	1	1	**1:** RGB
Dual RGB-Input Card 2xVGA	2x 1	1	**1:** RGB
Quad Analog Video Card 1xLFH-160	4x 1	1	**1:** Composite **2:** S-Video
Streaming Video Card 2xRJ45	4x 1	1	**1:** Streaming Video
SDI Card 4xBNC	4x 1	1	**1:** SDI

In case of a StreamingVideoCard, select the desired source from the **StremSourceList**.

Some control elements are no longer visible if the dialog box size is reduced. Enlarge the dialog box until all control elements are again visible (drag with mouse).

The depiction of the window content in blanking mode can be selected from the Decoration tab.

All commands except the selection of a new video or RGB source (from list box) are sent immediately to the associated viewer and applied.

General rule:

All entries into editable text fields (e.g., manual entries such as URLs) as well as the automatic name import (when selecting from list box) have to be confirmed with the Apply or cancelled with the Discard button.

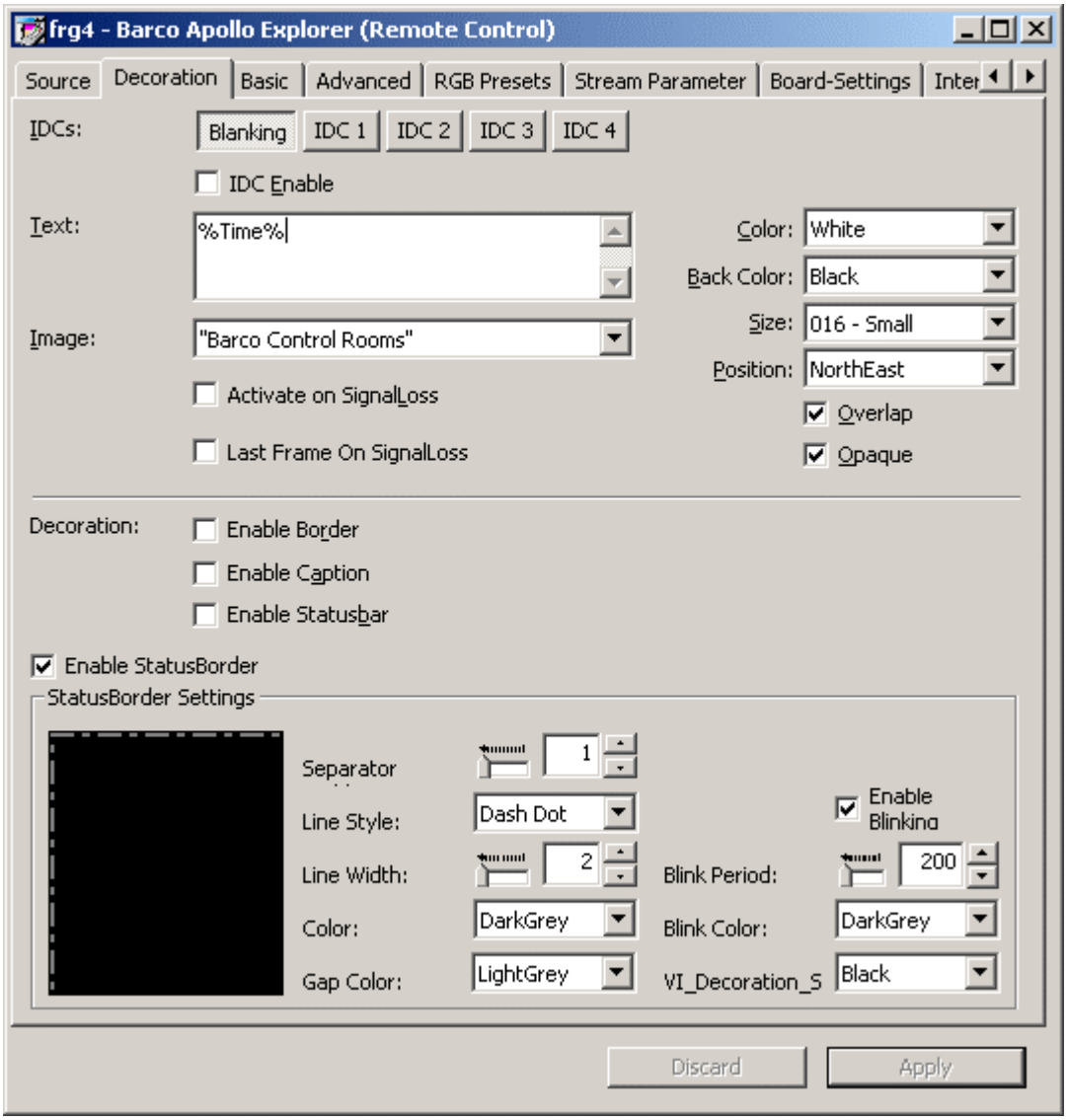
The display parameters can be checked and set. These parameters can also be set on the **Advanced** tab.

6.8.1.2 Decoration

The **Decoration** tab is identical for all viewers. Here you can select whether to hide or show the title bar and/or status bar as well as the type and content of the information to be overlaid over the actual content of the viewer window.

If the entire window content is covered by an image, for example, the term used is **Blanking**.

If information is displayed covering only certain positions of the actual window, the term used is **In Display Caption** (IDC). You can define and activate up to 4 IDCs.



Click on **Blanking** (or **Idc1**, **Idc2**, **Idc3**, **Idc4**) to define the information to be depicted in the blanking mode (information to be depicted as **IDC1**, **IDC2**, **IDC3**, **IDC4**).

The entry of IDC1 will be displayed as banner in the FRGpicture preview in Apollo Explorer, Remote Desktop, no matter if IDC1 is enabled or not.

The information selected in blanking mode can also be displayed in case the signal is lost (check the option **Activate on SignalLoss**).

For sources of type Streaming Video the option **Last Frame on SignalLos** can be selected. In case both options are checked (**Activate on SignalLoss**, **Last Frame on SignalLos**) the blanking image is overlaid the last frame and – depending on the blanking image – probably nothing of the last frame can be seen...

Select the **IdcEnable** option to overlay the selected information over the actual viewer window content according to settings.

Information can consist of any text, system parameters such as date and time (cf. Placeholders for In Display Caption Texts), and an image (logo). The available images are defined in the **ServerData\Globals.ini** file and identical for all viewers. Colors and font sizes are defined in this file as well.

You can select text color, text background color, size, and position for **In Display Caption**. Click on the **Opaque** option and the text is displayed on the selected color; otherwise, the background is transparent. In case the **Overlap** checkbox is ticked, the IDC is displayed within the insertion. Remove the tick to have it displayed outside the insertion! Please note that **Overlap** has no effect in case the IDC is centered!

The logo is always positioned in the corners of the windows followed by the text unless **Center** is selected. Selecting the **Center** position always places the logo to the left of the text.

Changes in the text field are not effective unless the Apply button is clicked. All remaining settings are applied without additional confirmation.

The available IDC positions are as follows:

- Northwest (upper left)
- Northeast (upper right)
- Southwest (lower left)
- Southeast (lower right)
- Center (centered)
- Center North (centered at the top)
- Center South (centered at the bottom)

The **Center North** and **Center South** positions overlay a **banner**, i.e., the IDC covers the entire width of the viewer window. If a logo is part of this IDC it is displayed in the upper or left or bottom left corner.

An **In Display Caption** does not overlay the content of the viewer window until the **IDC enable** option has been activated. This option always refers to the currently clicked IDC button.

If several IDCs are activated simultaneously, they are aligned across the content of the viewer window in the order IDC1, IDC2, IDC3, IDC4. For example, if the position Northwest is selected for all IDCs, then IDC1 is depicted at the upper left, IDC2 below that, etc.

Title bar (**EnabelCaption**)and status bar (**EnableStatusbar**) of the window can be hidden or shown. The title bar shows the **Ident** parameter of the viewer. The status bar lists the name or URL of the linked source as well as information about the downloading progress of the page.

In addition the **border** of the window can be enabled or disabled. If disabled, the caption is automatically disabled, too.

Without border, no caption can be displayed.

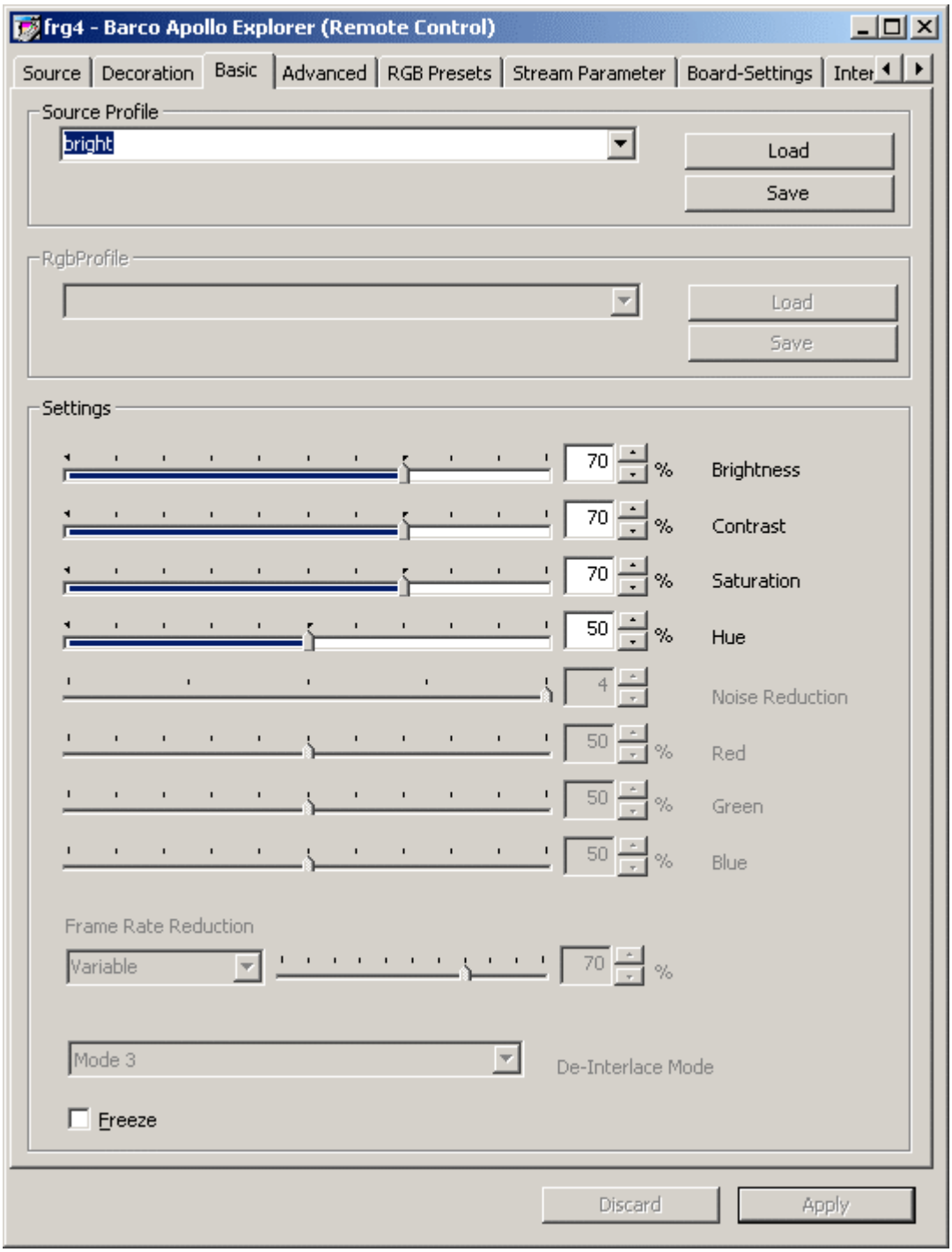
If the **StatusBorder** is enabled, the insertion is surrounded by a frame. The type of frame can be defined with regard to **Separator Width**, **Line Style**, **Line Width** and **Color**. In case Line Style is not solid, the gap color can also be defined.

This frame can be set static or blinking (**Enable Blinking**)

The frame is always surrounding the insertion. It is not surrounding the window!

All selections are immediately applied to the preview. To apply them also to the viewer window, click on **Apply**.

6.8.1.3 Basic



Use the **Basic** tab to load and save the profile file of the source and the timing of the signal

The name of the source profile and of the timing may not contain any empty spaces. Only the characters up to the empty space are applied to the name and saved.

The following source parameters may be used as well:

Description	Remarks
Brightness	Setting applies to all kind of Video, RGB and HDTV input cards
Contrast	Setting applies to all kind of Video and HDTV input cards
Saturation	Setting applies for the QuadAnalog Video card, the SDI Video card and the Streaming Video card.
Hue	
Noise Reduction	**Noise reduction** can be set in the range from zero to 16. The higher the value, the more noise is reduced, but also details get lost. Default value is 12.
Setting of red	
Setting of green	
Setting of blue	

Select **Freeze** to stop the current film scene (freeze-frame).

With Video, there are 5 different **de-interlacer modes**. The best one to be selected depends on the type of the displayed video.

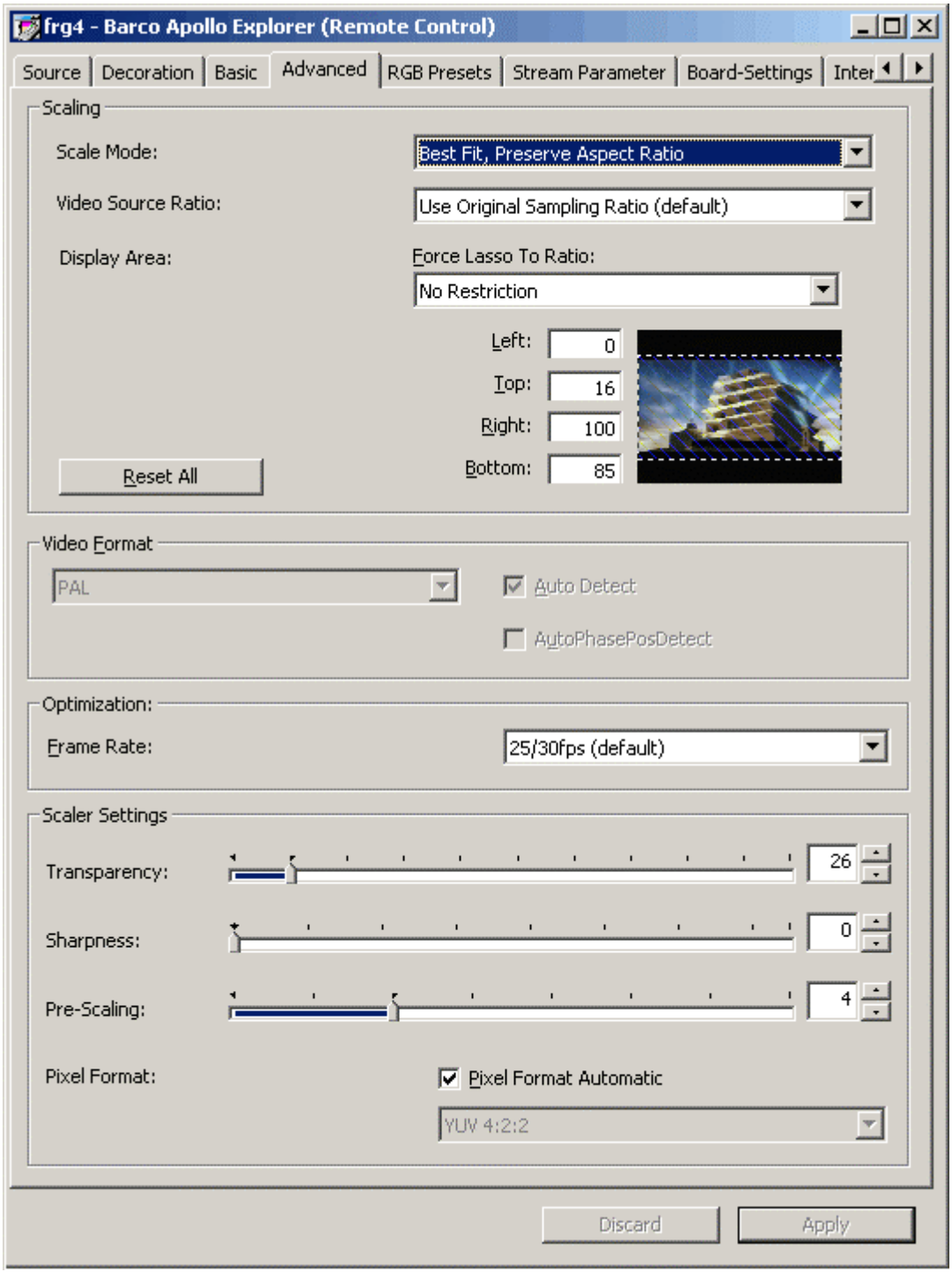
Mode 1: deinterlacer off; mode 2: interlace mode 1; mode 3: motion (default value), mode 4: even frame; mode 5: odd frame.

(Other values than the default mode might be recommended in case the video has been produced from a cinema film)

With RGB sources, in addition to the static reduction (1/3 for dual channel mode) a dynamic frame rate reduction can be set. The higher the frame rate reduction, the less consumption of bandwidth. The dynamic frame rate reduction of 100% in total reduces the frame rate by a factor of 384 (dual channel mode), e.g. a signal with 75Hz is displayed with 1 frames per 5 seconds.

Select **Freeze** to stop the current film scene (freeze-frame).

6.8.1.4 Advanced



Use the **Advanced** tab to define a section as well as set additional video parameters.

Select the section using its position (left, top, right, bottom; all values in percent) or draw the section with the mouse. Values indicated in percent are applied immediately when the section is drawn with the mouse. If the values in percent are changed, the **Apply** button has to be clicked before the thus selected section is update– - as with all editable text fields.

The **Force Lasso to Ratio** list box offers an additional option of selecting an image section. This box lists the most frequently used video and film aspect ratios:

List Box Entry	Aspect Ratio
No restriction	
TV 4/3	4:3
CinemaScope1	41:27
CinemaScope2 16/9	16:9
CinemaScope3	41:18
CinemaScope4	41:17

Click **Reset All** to undo the section selection and to return to displaying the entire image.

As for the entire video, the display options **native size**, **best fit preserve aspect ratio**, **fit to window** are available for the section as well. Select the desired **scale mode** from the list box.

Depending on the settings and size of the window, the then required scaling factors could no longer be realized by the used input cards. The video is then depicted with a black border.

The **Video Format** can be chosen using the list box with the same name.

Select **AutoDetect** to apply the settings detected by the hardware. With **AutoPosdetect** enabled, the visible portion of the signal is automatically detected and positioned in the FRG Viewer window.

Frame rates can be switched between **25fps/30fps** and **50fps/60fps**. Default setting is 25fps/30fps.

The **scaler settings** allow to set **transparency**, **sharpness** and **pre-scaling** factor as well as to select the Pixel format.

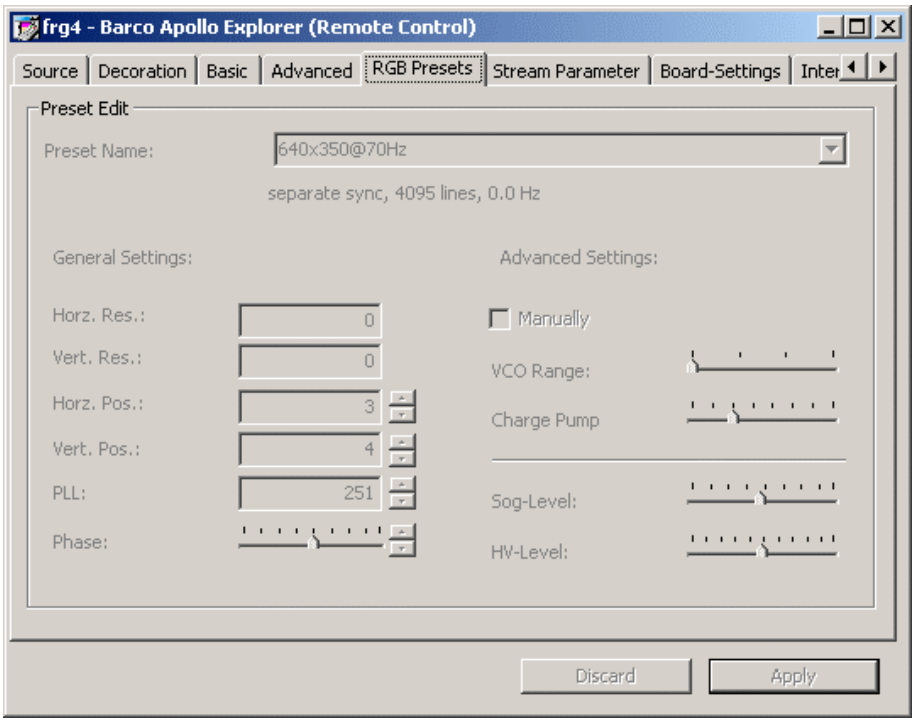
Transparency refers to graphic objects on the video, e.g. the clock. Default value is 0.

Sharpness adjusts the sharpness factor, default value is 0.

Pre-scaling defines how many pixels of a 16-pixel-package in x and y direction are omitted due to downscaling in the input card, e.g. 8 means: 8 of 16 pixels in x and y direction remain (= ¼ of the entire amount of video pixels remain).

The default setting for the **pixel format** for video is YUV 4:2:2. This format gives the impression of 24 bit true color video image at the bandwidth of 16 bit. For RGB, the default setting is 5:6:5. In case the content is very critical with respect to color, 8:8:8 can be selected. However, this format requires 1.5 times more bandwidth.

6.8.1.5 RGB Presets



It is not possible to define a preset with a number of vertical lines different from the actual number of vertical lines of the currently connected signal!

The Preset Edit functionality of the RGB Preset tab is only intended to modify the settings of a connected signal and NOT to edit at will any preset.

Selecting a preset with a different number of vertical lines than the connected signal, and modification of these settings, results in an inconsistent preset and overwrites a correct preset!

Whenever you edit a preset, rename it before pressing Apply! This ensures that you do not overwrite a correct preset.

Select a predefined **preset** from the list box or define a new **preset name**. A preset comprises the settings for all the parameters of the RGB sources which can be defined on this tab:

General Settings	
Horz. Res.:	Enter the horizontal resolution of the RGB source
Vert. Res.:	Enter the vertical resolution of the RGB source
Horz. Pos.:	The horizontal position of the monitor signal in relation to the window is adjusted
Vert. Pos.:	The vertical position of the monitor signal in relation to the window is adjusted
PLL:	The value represents the actual number of pixels per line
Phase:	Adjustment of the phase
Advanced Settings	
Manually	Enables the automatic setting of the following parameters:
Sync Type	Selects the type of sync of the signal, e.g. H/V Separate
VCO G	VCO Gain (only applicable with RGB-2774-0)
VCO Range:	VCO Range (only applicable with RGB-2774-1)
Charge Pump	Charge Pump Current
SoG Level	Level of signals with Sync On Green
HV Level	Level of signals with Hsync, Vsync

6.8.1.6 FRG Viewer profile file

Source and RGB profiles are stored in the **FRGviewer.ini** file located in the project directory. These are global profiles for a viewer type and apply to all computers of the network.

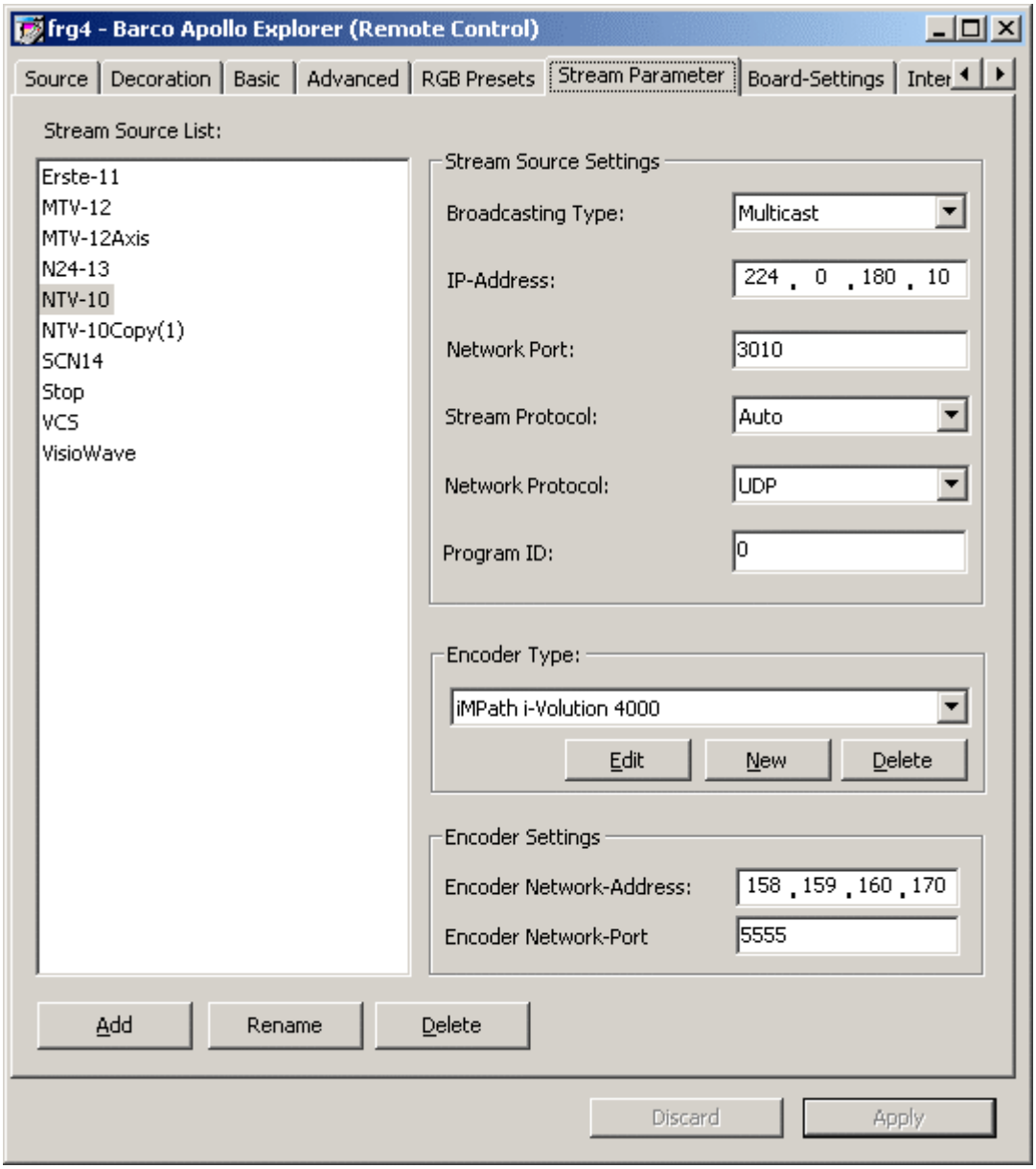
The name of the profile file may not contain any empty spaces. Only the characters up to the empty space are applied to the profile name and saved.

The following settings are saved in the profile file:

SourceProfile:	**Source Profile (Video Source)**	**Setting on Tab**
VideoBrightness	Brightness	Basic
VideoContrast	Contrast	Basic
VideoHue	Color hue	Basic
VideoSharpness	Focus	Basic
VideoSaturation	Saturation	Basic
WndFreeze	Activates or deactivates freeze-frame	Basic
WndScaleMode	Scaling mode	Source
WndViewportRatio	Aspect ratio	Advanced
WndViewport	Selected section	Advanced
AutoDetect	Automatic signal detection	Advanced
Channel	Channel	Advanced
Port	Port	Advanced
VideoNorm	Video standard	Advanced
ReferencedRgbProfileName	Associated RGB profile	
RgbProfile:	RGB profile (RGB source)	
RGBRed	Red setting	Basic
RGBBlue	Blue setting	Basic
RGBGreen	Green setting	Basic
RGBReduction	Setting of reduction rate	Basic

Loading a source profile also loads the referenced RGB profile.

6.8.1.7 Stream Parameter



Use this tab to select and/or configure a digital video stream.

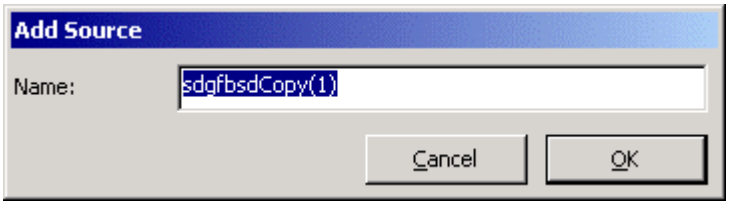
There are two *.ini-files related to the streaming video: the DigitalStreamSource.ini and the EncoderTypes.ini, cf. The ServerData\DigitalStreamSource.ini-file, The ServerData\EncoderType.ini-file

Stream Source List	**This list box shows all the sources defined in the DigitalStreamSource.ini file**
Broadcasting Type	Use this list box to select the desired type: Unicast (the signal is exclusively assigned to this port), Multicast (this port is a member of a group and takes part in multicasting), Broadcast (this port takes part in multicasting)
IP Address	IP address, if multicast is selected
Network Port	The port of the streaming source
Stream Protocol	0: auto (standard), 1: elementary, 2: program, 3: transport
Network Protocol	Read only, gives information about the used protocol, 0: UDP (default), 1: TCP
Program ID	Read only, gives information about the Program ID (0: auto)

Encoder Type	This list box lists some of the most common encoder types . This types are listed and defined in the EncoderTypes.ini files.
Encoder Network-Address	IP address of the encoder, this information is read from the EncoderTypes.ini file
Encoder Network Port	Network port of the encoder, this information is read from the EncoderTypes.ini file

6.8.1.8 Add

Click on the **ADD** button to add a new digital streaming source. A dialog is displayed where you can enter the desired name of the source (the proposed name is the name of the currently selected source with the extension Copy(x)):

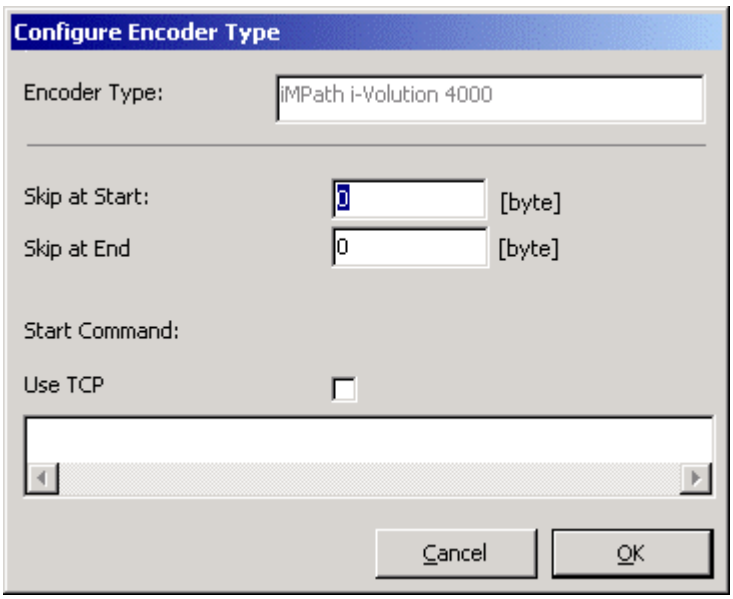


A source can also be renamed (**Rename**) or deleted (**Delete**) from the stream source list.

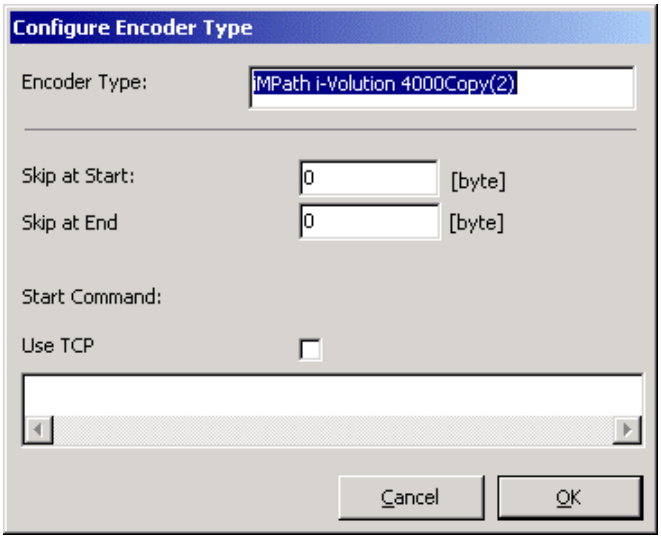
Any modifications of the stream source list and parameter of the sources are saved in the DigitalStreamSource.ini file..

6.8.1.9 Configure encoder

The parameters of the encoder are read from the **EncoderTypes.ini**-file. These parameters can be modified by clicking the **Edit** button:

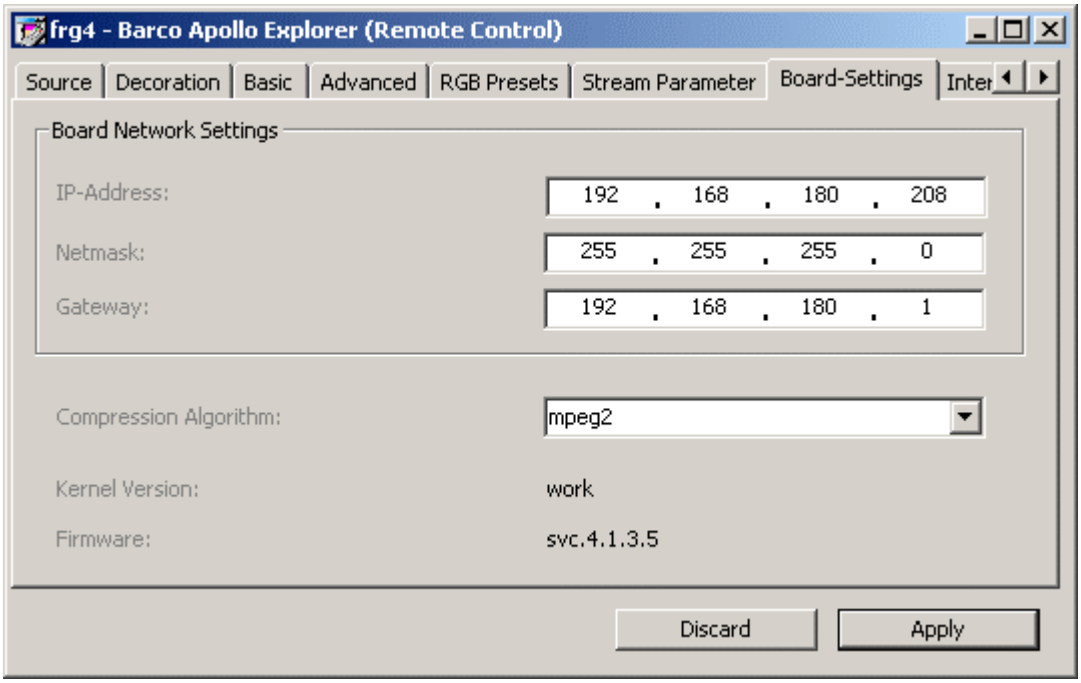


Furthermore, additional encoders can be specified clicking the **New** button:



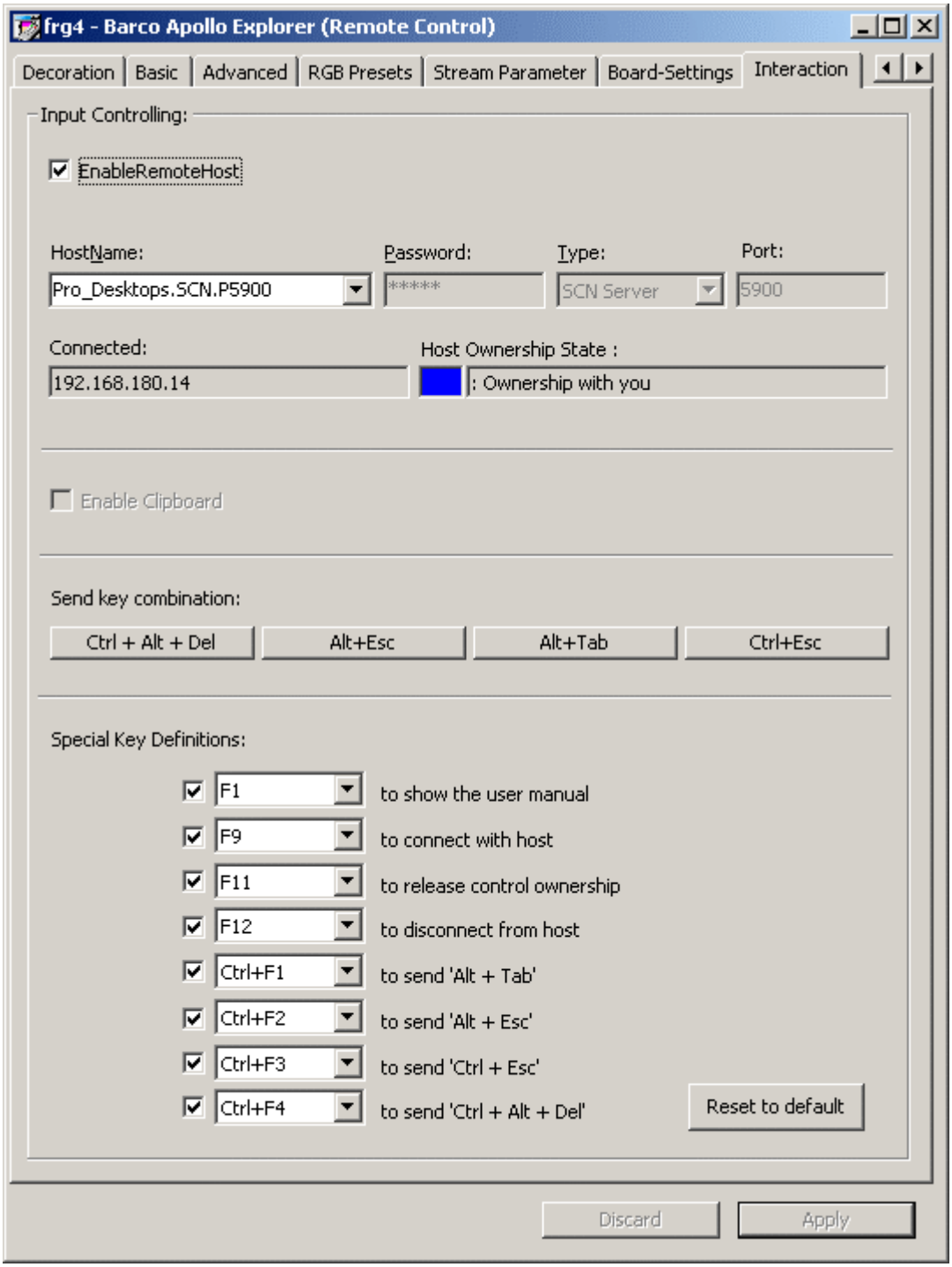
Any modifications of the encoder parameters are saved in the EncoderTypes.ini file.

6.8.1.10 Board Settings



This tab shows the settings of the Streaming Video Card. These settings are taken from the Switcher Language Compiler file, section board settings (**mpg3012**), cf. Steps required to configure the FRG Viewer.

6.8.1.11 Interaction



In case you want to manipulate the RGB source displayed in the FRG viewer on the FRG viewer with keyboard and mouse of the display wall, the ProServer has to be installed on the respective workstation which desktop is displayed. The tab **Interaction** of the FRG viewer allows to connect to the ProServer or the VNC server and to gain control over the respective desktop/source.

The commands to **connect** to the host workstation, to **disconnect**, to **Release control ownership** can be given using special keys. These keys can be set selecting one of the entries in the list box. In addition the most common Windows key combinations can be defined (Alt+Tab: switch between open items, Alt+Esc: Cycle through items in the order they were opened, Ctrl+Esc: display Start menu, Ctrl+Alt+DEL: launch Task Manager).

Control is not possible with the SCN (the SCN does not the support the VCN protocol as it is used in Apollo).

6.8.2 Visu Viewer

Use the **Visu Viewer** to view analog videos and RGB sources connected via a Visu Video Input Unit or Visu RGB Input Unit.

The viewer window does not contain any menu or tool bars. Viewers are controlled via the command interface (see Viewer command Interface) or the **Properties dialog box**.

6.8.2.1 Visu Viewer properties dialog box

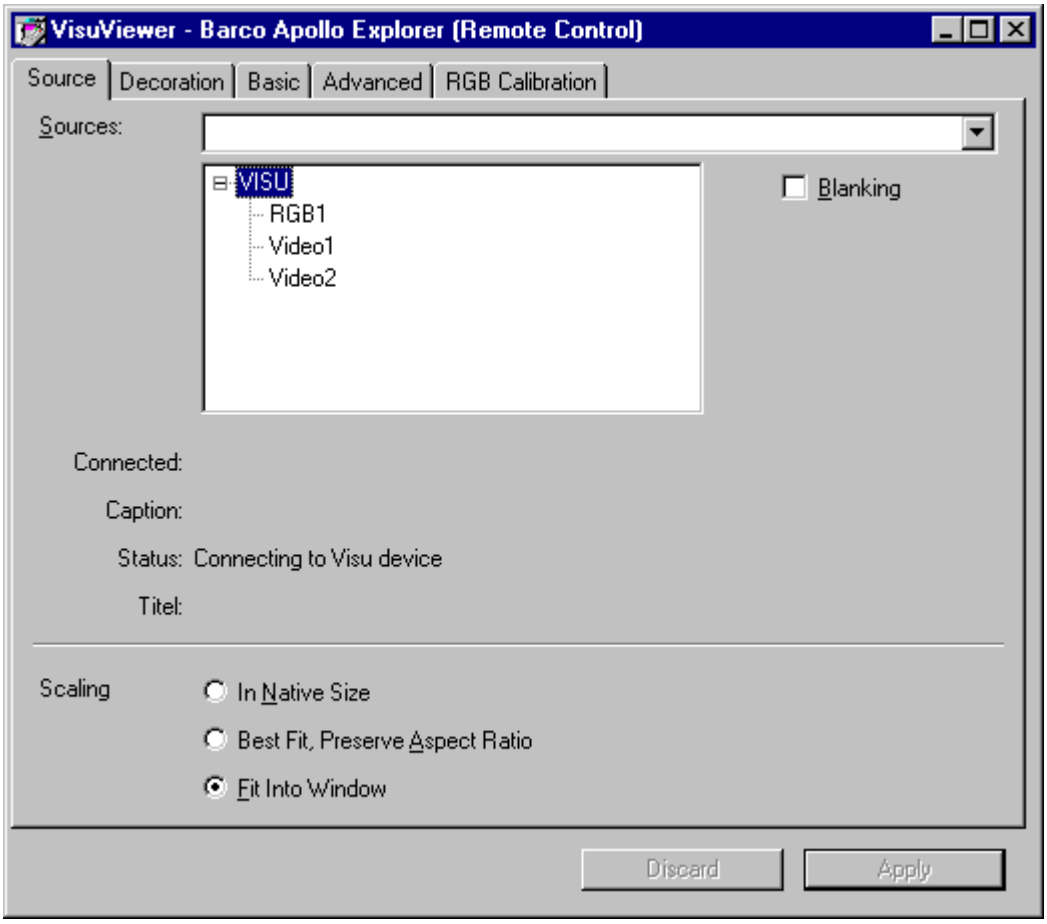
Open the properties dialog box of the viewer

- directly on the display wall using the shortcut key combination CTRL+ALT+Enter

or

- using the viewer's context menu (right mouse click on viewer name) in the Apollo Explorer, viewer category
- double click on the mini window of the viewer in the Apollo Explorer

Close the dialog box with the shortcut key **Alt+F4** or by click on the **Close** button in the title bar.



A simple mouse click on the **Source** tab selects a video or RGB source from a predefined list of sources.

The video sources listed in the selection list are defined in the ServerData\viewersources.ini file.

If a name has been assigned to this source, **SourceConnected** displays this name. **SourceCaption** shows the description entered in the **ServerDate\viewersources.ini** file.

An assigned title is depicted next to **Title**. **Status** refers to the status of the link with the source.

Select from scaling options: original resolution (**native size**), optimized while maintaining aspect ratio (**Best Fit**), or **fit to window** (aspect ratio and resolution are not preserved).

Some control elements are no longer visible if the dialog box size is reduced. Enlarge the dialog box until all control elements are again visible (drag with mouse).

Select **Blanking** to hide the entire content of the viewer window.

The depiction of the window content in blanking mode can be selected from the Decoration tab.

All commands except the selection of a new video or RGB source (from list box) are sent immediately to the associated viewer and applied.

General rule:

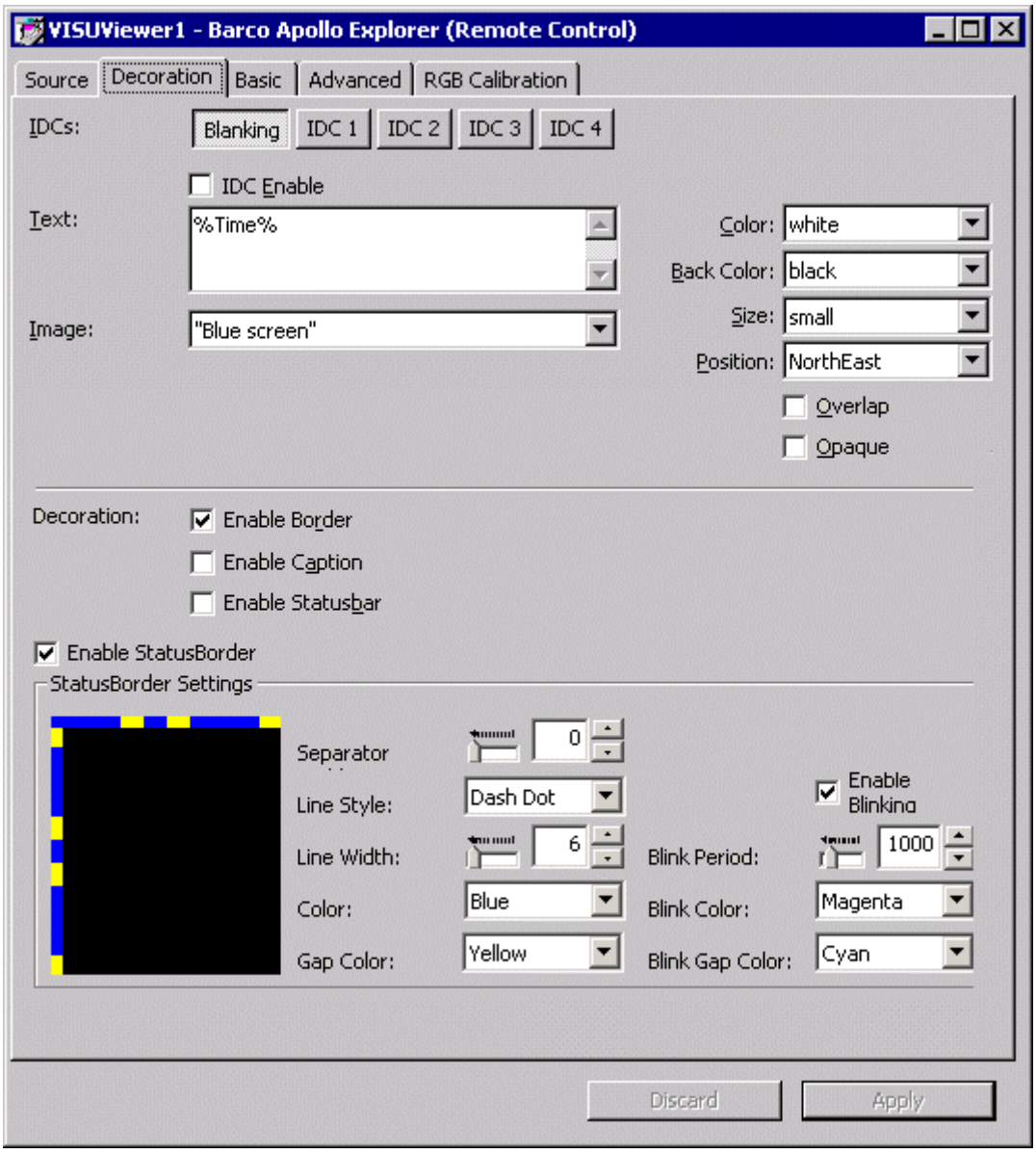
All entries into editable text fields (e.g., manual entries such as URLs) as well as the automatic name import (when selecting from list box) have to be confirmed with the Apply or cancelled with the Discard button.

6.8.2.2 Decoration

The **Decoration** tab is identical for all viewers. Here you can select whether to hide or show the title bar and/or status bar as well as the type and content of the information to be overlaid over the actual content of the viewer window.

If the entire window content is covered by an image, for example, the term used is **Blanking**.

If information is displayed covering only certain positions of the actual window, the term used is **In Display Caption** (IDC). You can define and activate up to 4 IDCs.



Click on **Blanking** (or **Idc1**, **Idc2**, **Idc3**, **Idc4**) to define the information to be depicted in the hide mode (information to be depicted as **IDC1**, **IDC2**, **IDC3**, **IDC4**).

Then select the **IdcEnable** option to overlay the selected information over the actual viewer window content according to settings.

Information can consist of any text, system parameters such as date and time (cf. Placeholders for In Display Caption Texts), and an image (logo). The available images are defined in the **ServerData\Globals.ini** file and identical for all viewers. Colors and font sizes are defined in this file as well.

You can select text color, text background color, size, and position for **In Display Caption**. Click on the **Opaque** option and the text is displayed on the selected color; otherwise, the background is transparent. In case the **Overlap** checkbox is ticked, the IDC is displayed within the insertion. Remove the tick to have it displayed outside the insertion! Please note that **Overlap** has no effect in case the IDC is centered!

The logo is always positioned in the corners of the windows followed by the text unless **Center** is selected. Selecting the **Center** position always places the logo to the left of the text.

Changes in the text field are not effective unless the Apply button is clicked. All remaining settings are applied without additional confirmation.

The available IDC positions are as follows:

- Northwest (upper left)
- Northeast (upper right)
- Southwest (lower left)
- Southeast (lower right)
- Center (centered)
- Center North (centered at the top)
- Center South (centered at the bottom)

The **Center North** and **Center South** positions overlay a **banner**, i.e., the IDC covers the entire width of the viewer window. If a logo is part of this IDC it is displayed in the upper or left or bottom left corner.

An **In Display Caption** does not overlay the content of the viewer window until the IDC enable option has been activated. This option always refers to the currently clicked IDC button.

If several IDCs are activated simultaneously, they are aligned across the content of the viewer window in the order IDC1, IDC2, IDC3, IDC4. For example, if the position Northwest is selected for all IDCs, then IDC1 is depicted at the upper left, IDC2 below that, etc.

Title bar (**EnableCaption**) and status bar (**EnableStatusbar**) of the window can be hidden or shown. The title bar shows the **Ident** parameter of the viewer. The status bar lists the name or URL of the linked source as well as information about the downloading progress of the page.

In addition the **border** of the window can be enabled or disabled. If disabled, the caption is automatically disabled, too.

Without border, no caption can be displayed.

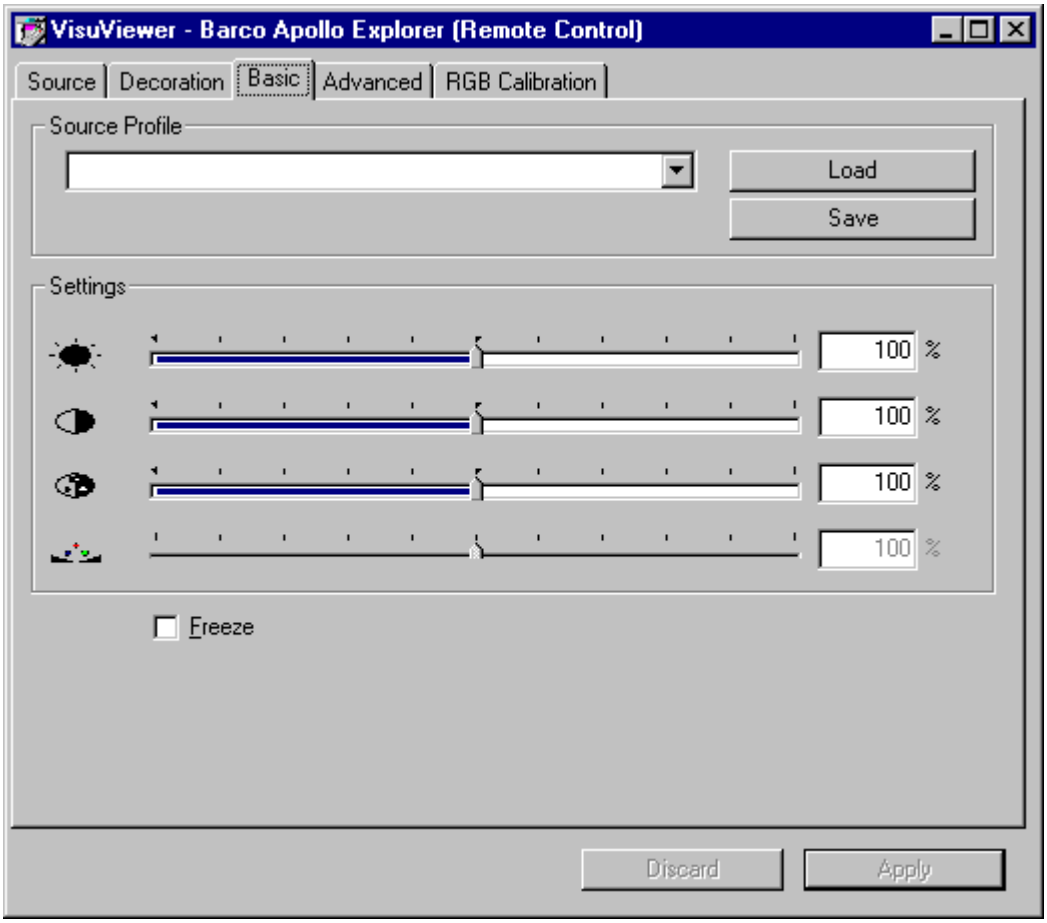
If the **StatusBorder** is enabled, the insertion is surrounded by a frame. The type of frame can be defined with regard to **Separator Width**, **Line Style**, **Line Width** and **Color**. In case Line Style is not solid, the gap color can also be defined.

This frame can be set static or blinking (**Enable Blinking**)

The frame is always surrounding the insertion. It is not surrounding the window!

All selections are immediately applied to the preview. To apply them also to the viewer window, click on **Apply**.

6.8.2.3 Basic (Video source)



Use the **Basic** tab to load and save the profile file of the source.

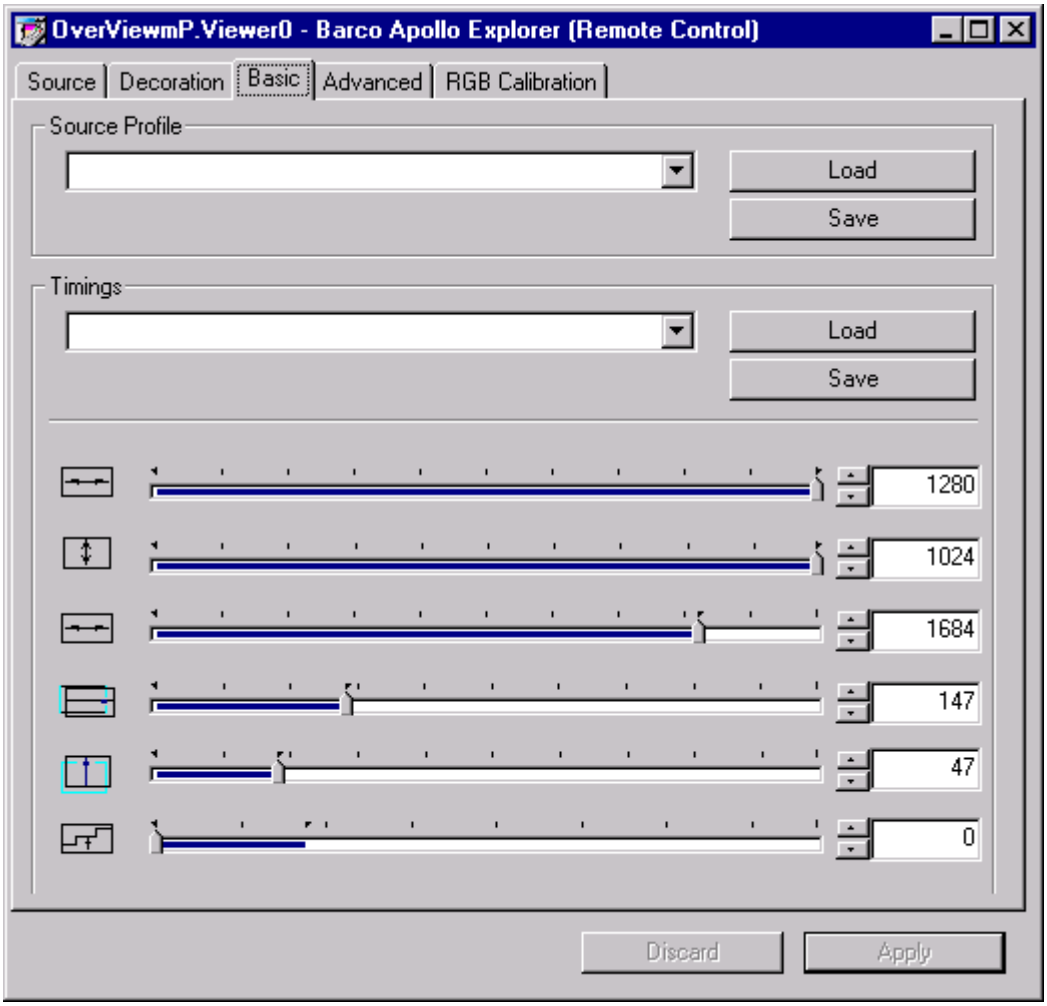
The name of the profile may not contain any empty spaces. Only the characters up to the empty space are applied to the profile name and saved.

The following source parameters may be used as well:

Symbol	Description
	Brightness settings
	Contrast settings
	Color saturation settings
	Color hue settings (only for NTSC)

Select **Freeze** to stop the current film scene (freeze-frame).

6.8.2.4 Basic (RGB source)



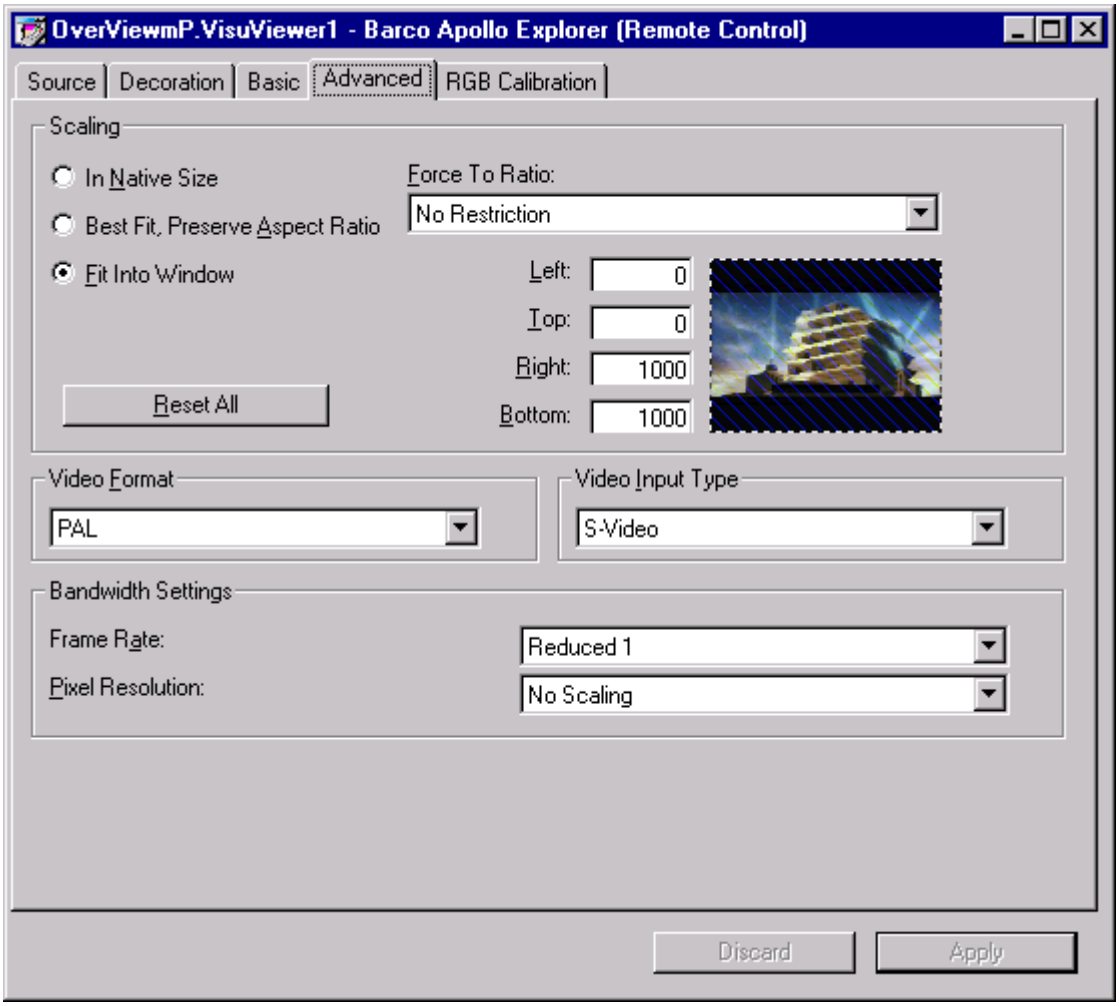
Use the **Basic** tab to load and save the profile file of the source and the timing of the signal

The name of the source profile and of the timing may not contain any empty spaces. Only the characters up to the empty space are applied to the name and saved.

The following source parameters may be modified as well:

Symbol	Description
	Horizontal resolution
	Vertical resolution
	Horizontal total pixels per line
	Horizontal phase
	Vertical phase
	Sampling phase

6.8.2.5 Advanced



Use the **Advanced** tab to define a section as well as set additional video parameters.

Select the image section using its position (left, top, right, bottom; all values in percent) or draw the section with the mouse. Values indicated in percent are applied immediately when the section is drawn with the mouse. If the values in percent are changed, the **Apply** button has to be clicked before the thus selected section is updated - as with all editable text fields.

The **Aspect ratio** selection box offers an additional option of selecting an image section. This box lists the most frequently used video and film aspect ratios:

List Box Entry	Aspect Ratio
Any	Any
TV	4:3
CinemaScope1	41:27
CinemaScope2	16:9
CinemaScope3	41:18
CinemaScope4	41:17

Click **Reset** to undo the section selection and to return to displaying the entire image.

The display options **In Native Size**, **Best fit, Preserve Aspect Ratio**, **Fit to Window** are available to the entire video image as well.

The **Video Format** can be chosen using the list box with the same name. Use the **Video Type** field to specify class S video or composite video (BNC).

Use the **Bandwidth Settings** box to select the refresh rate and pixel resolution.

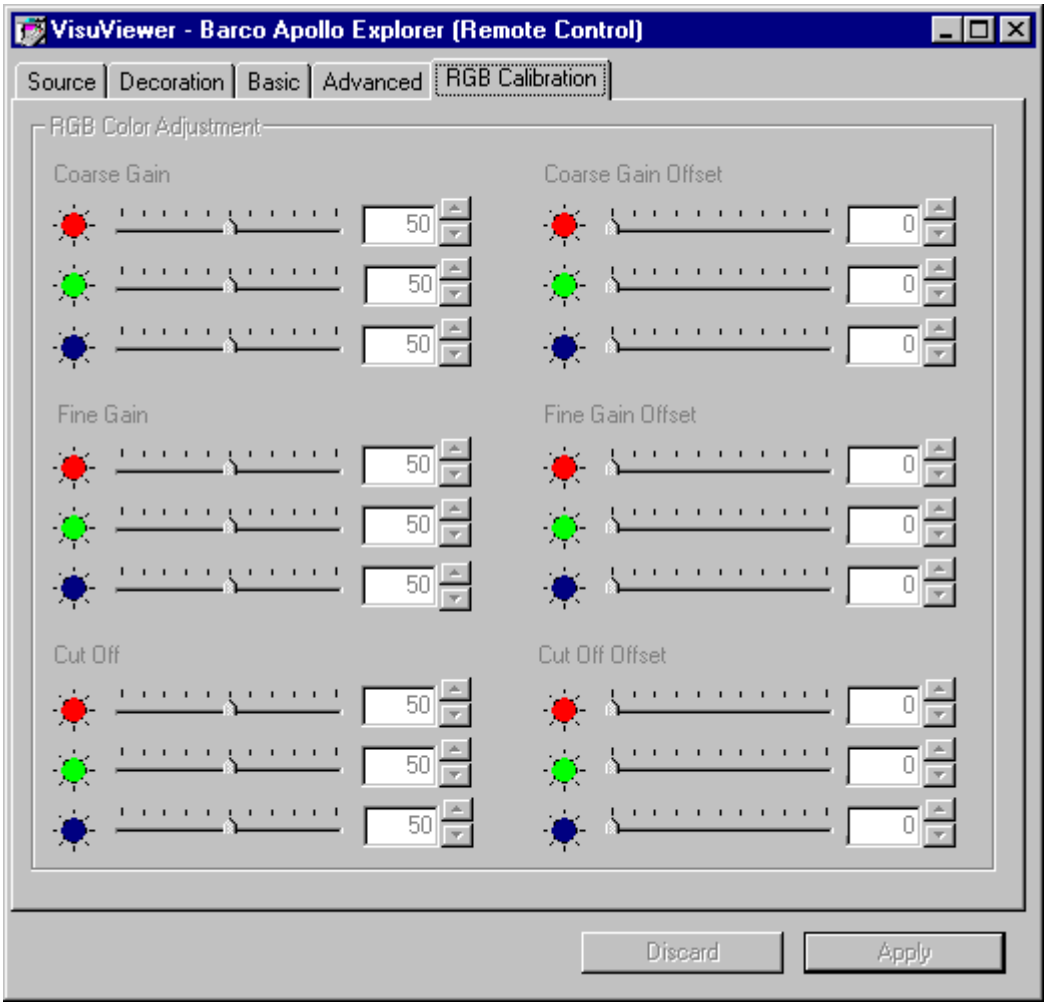
The following table lists the entries in the **Frame Rate** list box:

List Box Entry	Description
Maximum	Max. display refresh rate PAL: 50 frames/second NTSC 60 frames/second
Reduced 1	50% of max. refresh rate, PAL: 25 frames/second NTSC 30 frames/second
Reduced 2	25% of max. refresh rate, PAL: 12.5 frames/second NTSC 15 frames/second
Reduced 3	12.5% of max. refresh rate, PAL: 6.25 frames/second NTSC 7.5 frames/second

The following table lists the entries in the **Pixel Resolution** list box:

List Box Entry	Description
Maximum	Maximum resolution PAL: 720x540 NTSC 600x450
Reduced 1	50% of max. horizontal resolution PAL: 360x270 NTSC 300x225
Reduced 2	33% of max. horizontal resolution PAL: 240x180 NTSC 200x150
Reduced 3	25% of max. horizontal resolution PAL: 180x135 NTSC 150x112.5
Reduced 4	20% of max. horizontal resolution PAL: 144x108 NTSC 120x90

6.8.2.6 RGB Calibration



Adjust gain, offset and cut-off for each color individually. The values can be set either by means of the slider bar or via the spin buttons. Values adjusted via the slider bar or the spin button are applied at once, in case the text boxes are edited, the Apply button has to be clicked in order to activate the modified values.

6.8.2.7 Visu Viewer profile file

Source and RGB profiles are stored in the **visuviewer.ini** file located in the project directory. These are global profiles for a viewer type and apply to all computers of the network.

The name of the profile file may not contain any empty spaces. Only the characters up to the empty space are applied to the profile name and saved.

The following settings are saved in the profile file:

SourceProfile:	Source Profile (Video Source)	Setting on Tab
VideoBrightness	Brightness	Basic
VideoContrast	Contrast	Basic
VideoHue	Color hue	Basic
VideoInputType	Video type	Basic
VideoFormat	Video format	Basic
VideoSaturation	Saturation	Basic
WndScaleMode	Scaling mode	Source
WndFreeze	Activates or deactivates freeze-frame	Basic
WndViewportRatio	Aspect ratio	Advanced
WndViewport	Selected section	Advanced
HwFrameRateDivider	Refresh rate	Advanced
WndForceHorzVertScaling	Pixel resolution	Advanced
ReferencedRgbProfileName	Associated RGB profile	
RgbProfile:	RGB profile (RGB source)	
RGBHorzRes	Horizontal resolution	Basic
RGBVertRes	Vertical resolution	Basic
RGBHorzPhase	Horizontal phase	Basic
RGBVertPhase	Vertical phase	Basic
RGBsamplingPhase	Sampling phase	Basic
RGBHorzTotalPixels	Sum of horizontal pixels	Basic

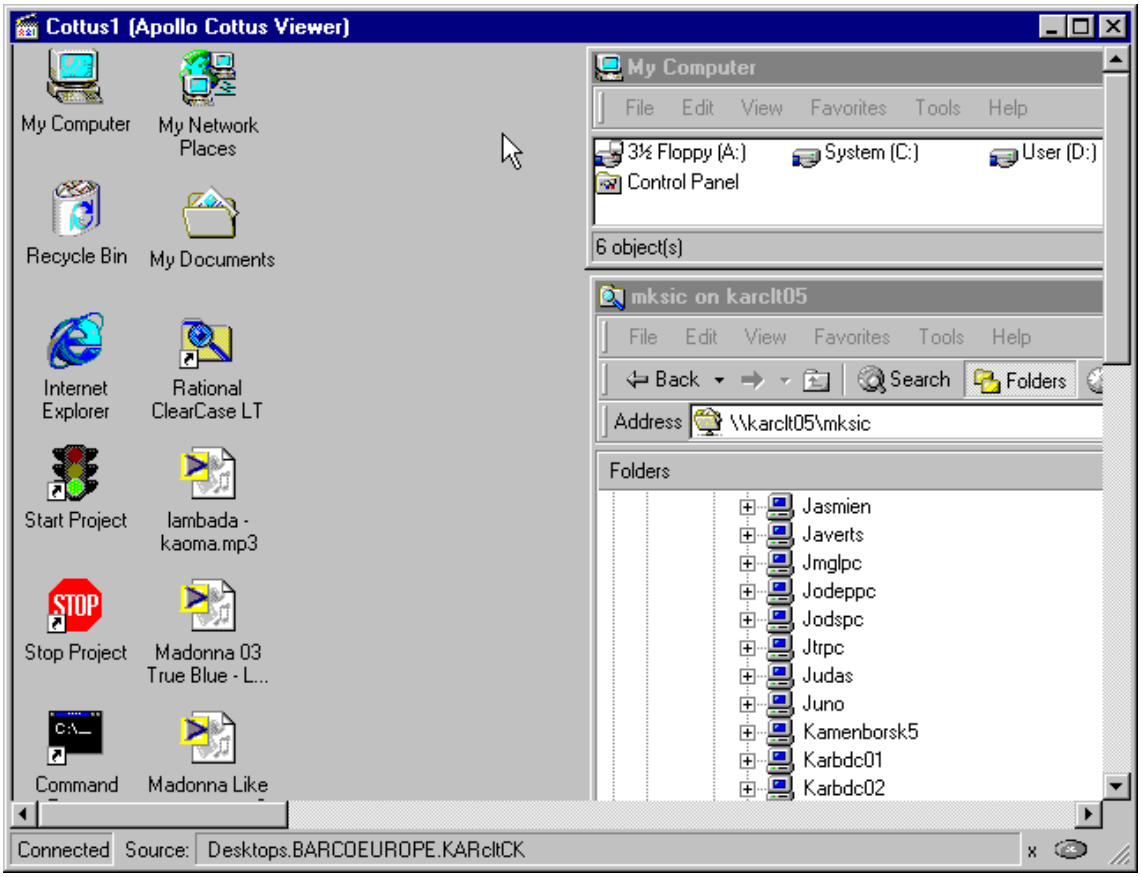
Loading a source profile also loads the referenced RGB profile.

6.8.3 Cottus Viewer

Use the **Cottus Viewer** to view the screen of any workstation within the network.

This requires that the Funk software as well as the Barco-Funk license is installed on the workstation with the screen to be viewed. Proxy Host Funk licenses for a different Master than Apollo are not valid!

See Chapter Steps required to configure the Cottus Viewer on how to install the Funk Proxy Host.



The viewer window does not contain any menu or tool bars. Viewers are controlled via the command interface (see Viewer command Interface) or the **Properties dialog box**.

6.8.3.1 Cottus Viewer properties dialog box

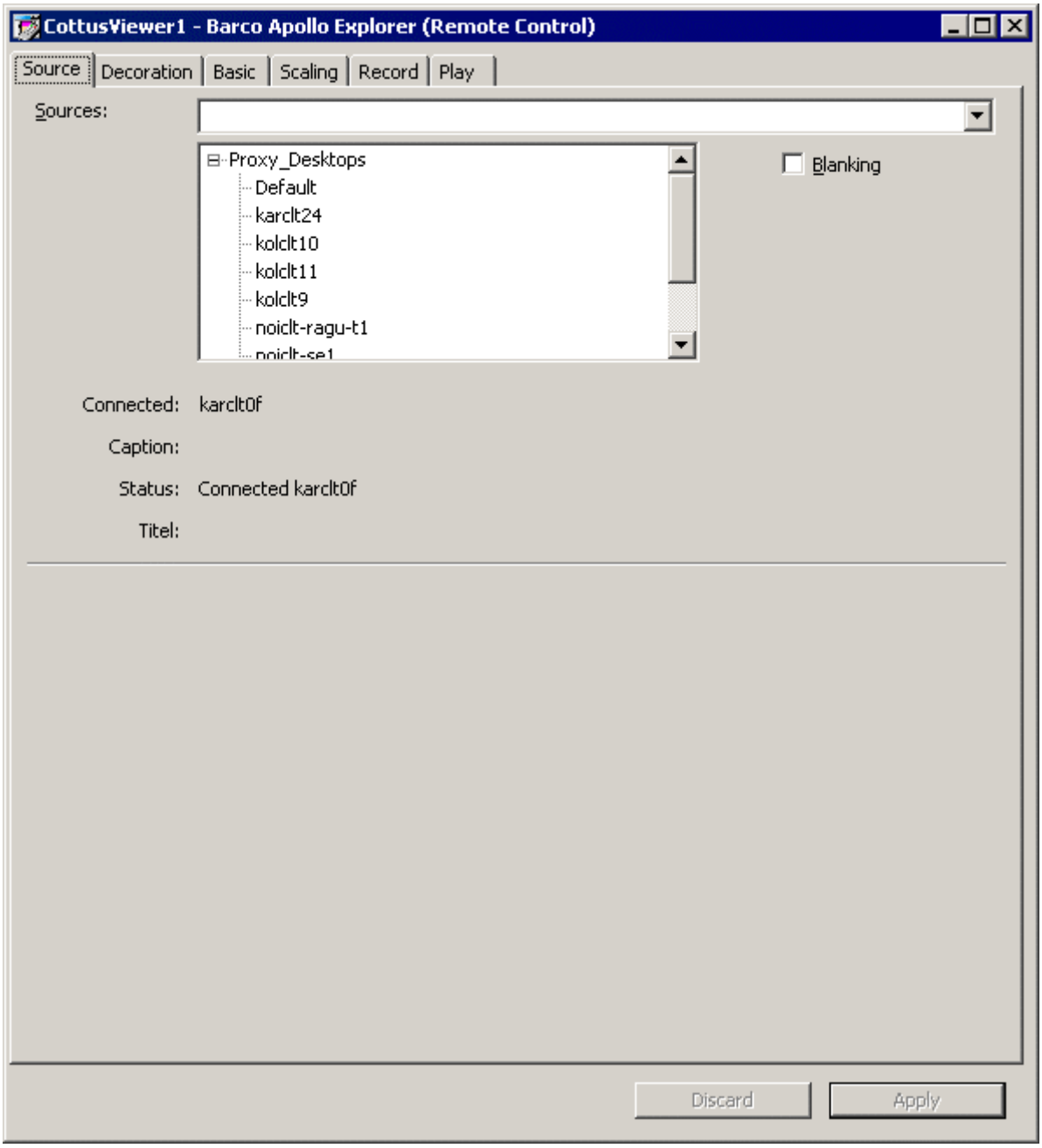
Open the properties dialog box of the viewer

- directly on the Display Wall using the shortcut key combination **CTRL+ALT+Enter**

or

- using the viewer's context menu (right mouse click on viewer name) in the **Apollo Explorer**, viewer category.
- double click on the mini window of the viewer in the **Apollo Explorer**

Close the dialog box with the shortcut key **Alt+F4** or by click on the **Close** button in the title bar.



A simple mouse click on the **Source** tab selects a workstation from a predefined list of sources.

The workstations listed in the selection list are defined in the ServerData\viewersources.ini file.

If a name has been assigned to this source, **SourceConnected** displays this name. **SourceCaption** shows the description entered in the **ServerDate\viewersources.ini** file.

An assigned title is depicted next to **Title**. **Status** refers to the status of the link with the source.

Select **Blanking** to hide the entire content of the linked desktop.

The depiction of the window content in hide mode can be selected from the Decoration tab.

All commands except the selection of a new workstation (from list box) are immediately sent to the associated viewer and applied.

General rule:

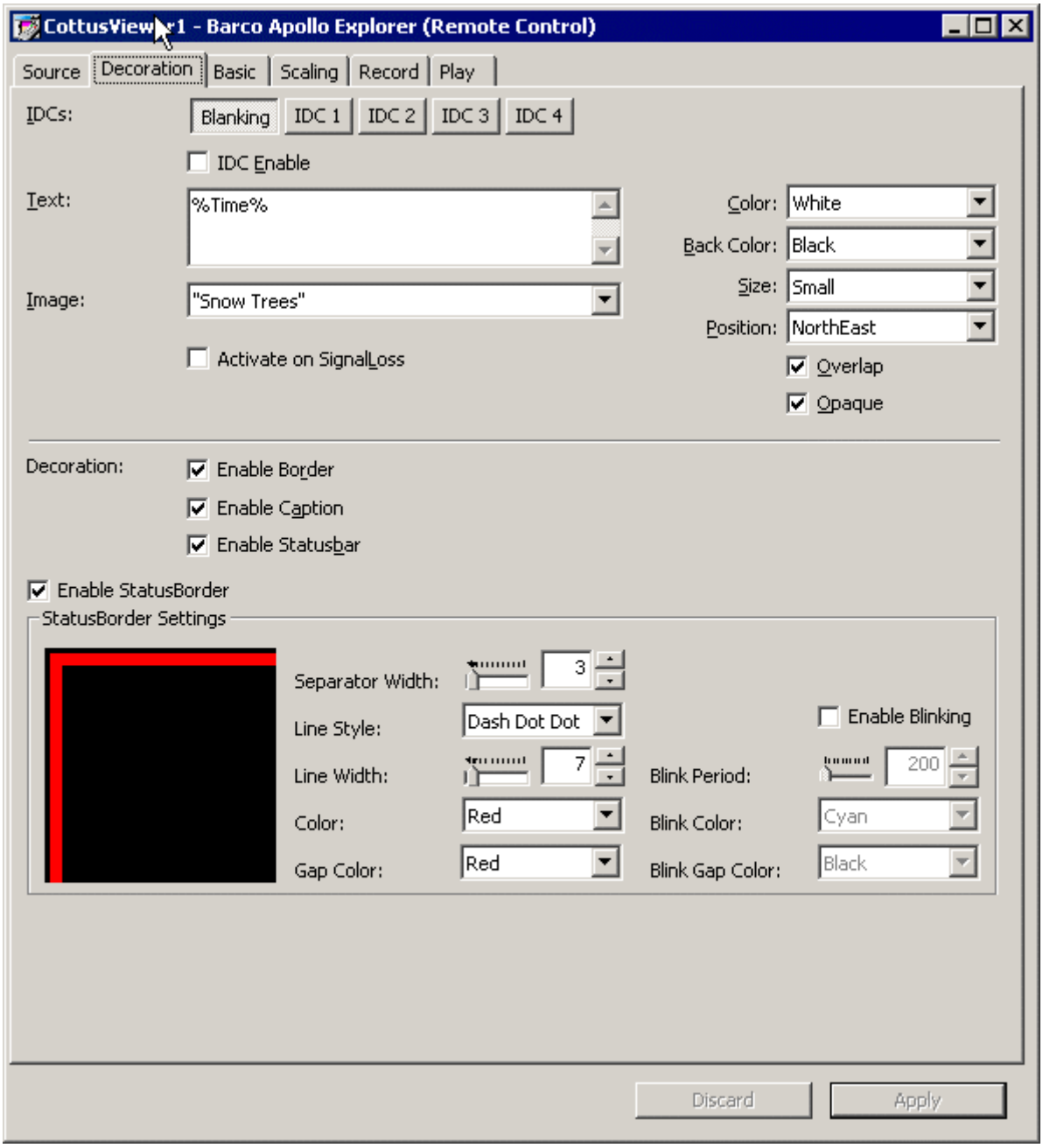
All entries into editable text fields (e.g., manual entries such as URLs) as well as the automatic name import (when selecting from list box) have to be confirmed with the Apply or cancelled with the Discard button.

6.8.3.2 Decoration

The **Decoration** tab is identical for all viewers. Here you can select whether to hide or show the title bar and/or status bar as well as the type and content of the information to be overlaid over the actual content of the viewer window.

If the entire window content is covered by an image, for example, the term used is **Blanking**.

If information is displayed covering only certain positions of the actual window, the term used is **In Display Caption** (IDC). You can define and activate up to 4 IDCs.



Click on **Blanking** (or **Idc1**, **Idc2**, **Idc3**, **Idc4**) to define the information to be depicted in the hide mode (information to be depicted as **IDC1**, **IDC2**, **IDC3**, **IDC4**). The information selected in blanking mode can also be displayed in case the signal is lost (check the option **Activate on SignalLoss**)

Then select the **IdcEnable** option to overlay the selected information over the actual viewer window content according to settings.

Information can consist of any text, system parameters such as date and time (cf. Placeholders for In Display Caption Texts), and an image (logo). The available images are defined in the **ServerData\Globals.ini** file and identical for all viewers. Colors and font sizes are defined in this file as well.

You can select text color, text background color, size, and position for **In Display Caption**. Click on the **Opaque** option and the text is displayed on the selected color; otherwise, the background is transparent. In case the **Overlap** checkbox is ticked, the IDC is displayed within the insertion. Remove the tick to have it displayed outside the insertion! Please note that **Overlap** has no effect in case the IDC is centered!

The logo is always positioned in the corners of the windows followed by the text unless **Center** is selected. Selecting the **Center** position always places the logo to the left of the text.

Changes in the text field are not effective unless the Apply button is clicked. All remaining settings are applied without additional confirmation.

The available IDC positions are as follows:

- Northwest (upper left)
- Northeast (upper right)
- Southwest (lower left)
- Southeast (lower right)
- Center (centered)
- Center North (centered at the top)
- Center South (centered at the bottom)

The **Center North** and **Center South** positions overlay a **banner**, i.e., the IDC covers the entire width of the viewer window. If a logo is part of this IDC it is displayed in the upper or left or bottom left corner.

An **In Display Caption** does not overlay the content of the viewer window until the IDC enable option has been activated. This option always refers to the currently clicked IDC button.

If several IDCs are activated simultaneously, they are aligned across the content of the viewer window in the order IDC1, IDC2, IDC3, IDC4. For example, if the position Northwest is selected for all IDCs, then IDC1 is depicted at the upper left, IDC2 below that, etc.

Title bar (**EnableCaption**) and status bar (**EnableStatusbar**) of the window can be hidden or shown. The title bar shows the **Ident** parameter of the viewer. The status bar lists the name or URL of the linked source as well as information about the downloading progress of the page.

In addition the **border** of the window can be enabled or disabled. If disabled, the caption is automatically disabled, too.

Without border, no caption can be displayed.

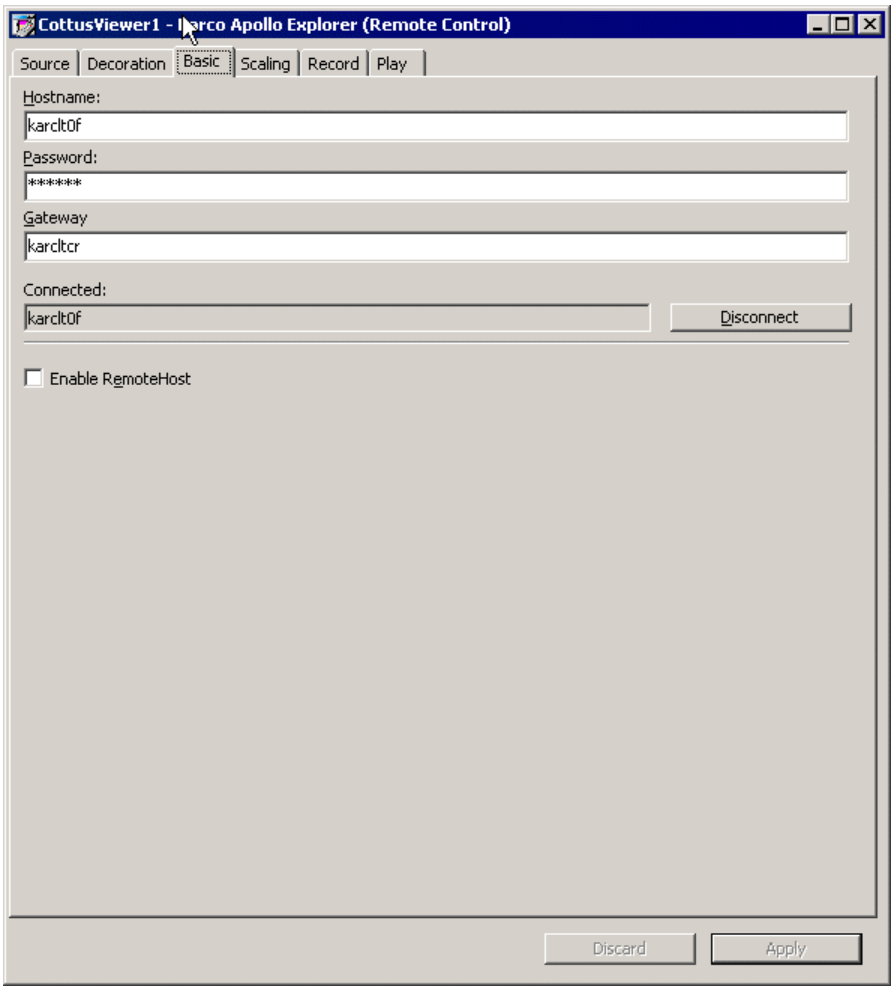
If the **StatusBorder** is enabled, the insertion is surrounded by a frame. The type of frame can be defined with regard to **Separator Width**, **Line Style**, **Line Width** and **Color**. In case Line Style is not solid, the gap color can also be defined.

This frame can be set static or blinking (**Enable Blinking**)

The frame is always surrounding the insertion. It is not surrounding the window!

All selections are immediately applied to the preview. To apply them also to the viewer window, click on **Apply**.

6.8.3.3 Basic



A server not listed on the selection list on the **Source** tab can be defined manually on the **Basic** tab. Enter the name of the server within the network (**Hostname**) as well as the **Password** to display the content of the associated screen. If the **Windows Authentication** mode has been set during configuration of the Proxy Host, no password has to be entered, but the credentials are used for authentication. Click on **Apply** button to establish the connection with this server and to display its screen content in the viewer window. **Disconnect** removes the link between the host and the desktop server. If the connection should be established via the **gateway**, enter the name of the gateway server registered for this host workstation.

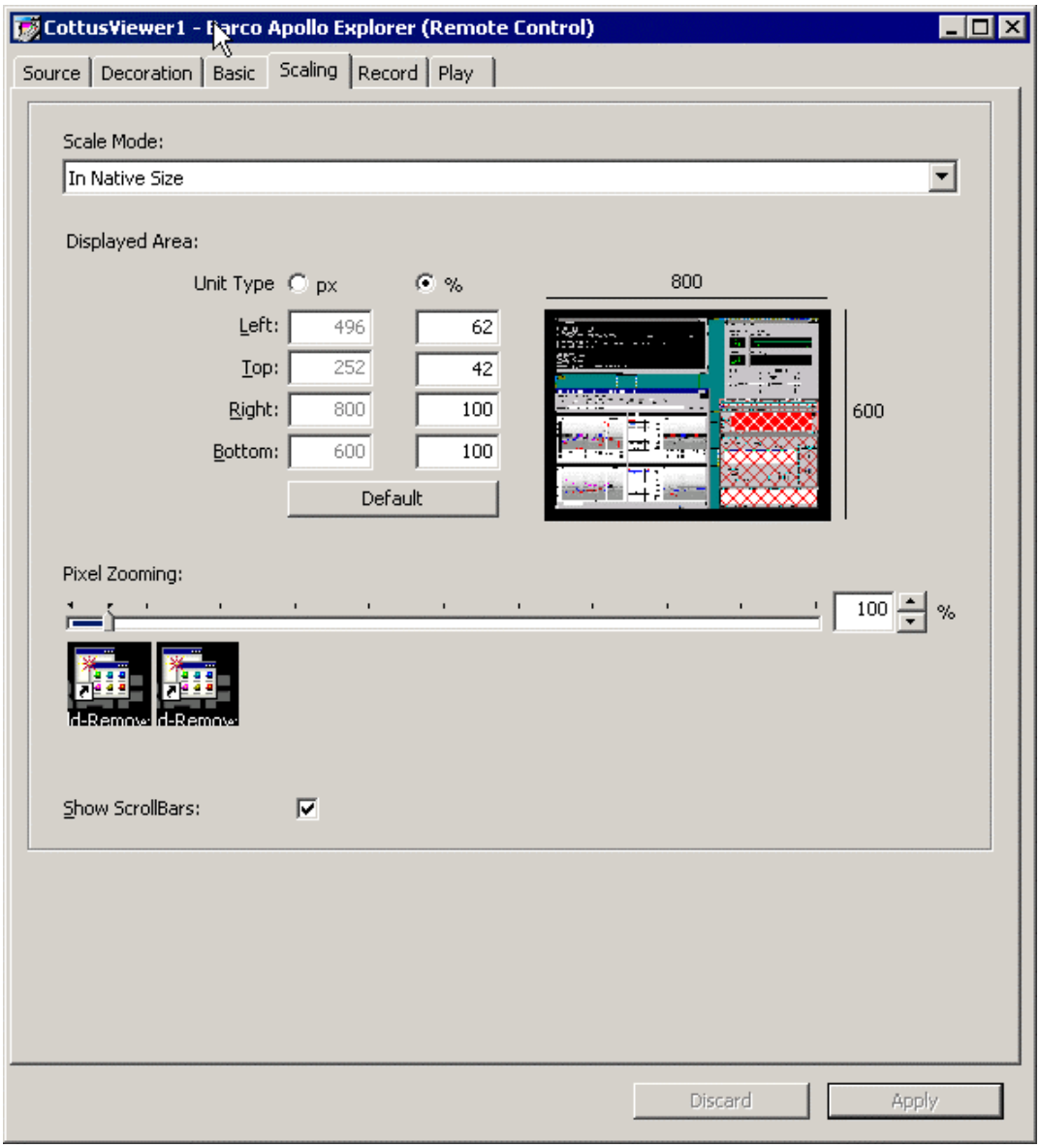
The Funk Proxy Host software and the associated license have to be installed on the host server.

With the **EnableRemoteHost** option activated it is possible to execute mouse and keycard operations of the operator workstation on the host server.

Deactivate the **EnableScaleMode** option to display the content of the screen in native size (original resolution) in the viewer window.

To enter "CTRL+Alt+Del" on the host workstation, use "CTRL+ALT+Backspace"!

6.8.3.4 Scaling



To display a desktop, select one of the scaling modes. Depending on the selected mode, the displayed area can be zoomed and/or scroll bars applied to the window to scroll to a different area than defined as displayed area.

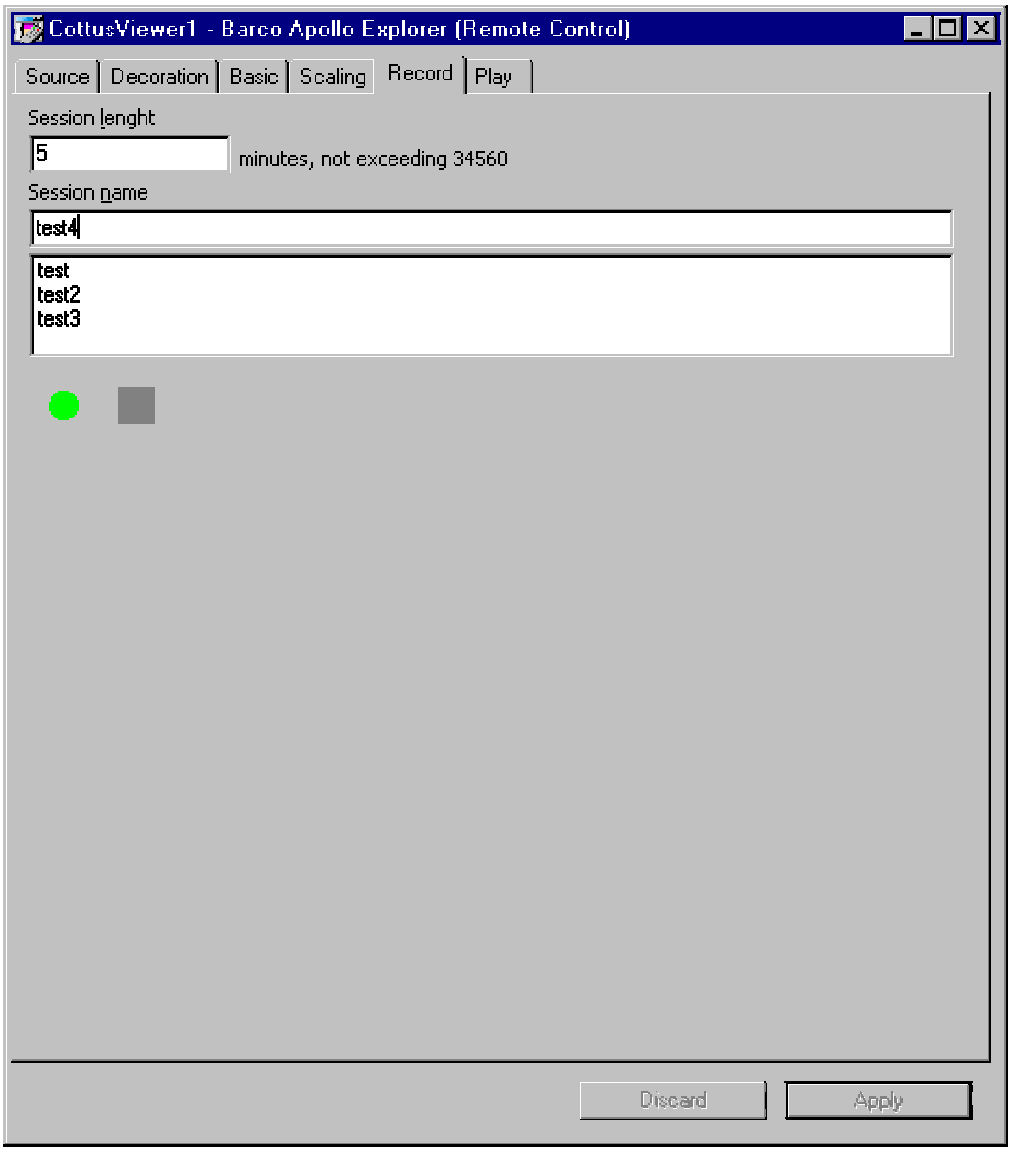
Scale mode	Zooming	Scroll bars
Fit window to source	Yes	No
In native size	Yes	Yes
Best fit, preserve aspect ratio	No	No
Fit into window	No	no

The displayed area can either be defined in percentage of the entire desktop, or specified in pixels, or defined by drawing in the preview area ("lasso"). No matter which way is chosen – the values of the other ways are immediately adjusted accordingly.

If a zooming factor is selected, the representative of the window beneath the scale is zoomed to show the effect of zooming. Zooming can be specified between 0% and 2000% of the selected display area. Use the slider bar to adjust the zooming factor, or use the spin buttons, or enter the desired numeric value.

Click on the **Apply** button to activate the modified settings.

6.8.3.5 Record



Recording is only available if the host workstation is connected via a Cottus Gateway server.

User this tab to record a host session for further playing back. Define the max. length of the session, which can of course not longer be than the max. length of recording specified for the gateway (Gateway Administrator). The length of a session is entered in minutes! The max. length is indicated next the entry field.

Define a name for the current session to be recorded.

A user friendly name can only be defined if the respective permissions have been allowed, cf. How to configure the Proxy Gateway**. Otherwise defining a name fails.**

In the field below the already recorded sessions stored on the gateway are listed.

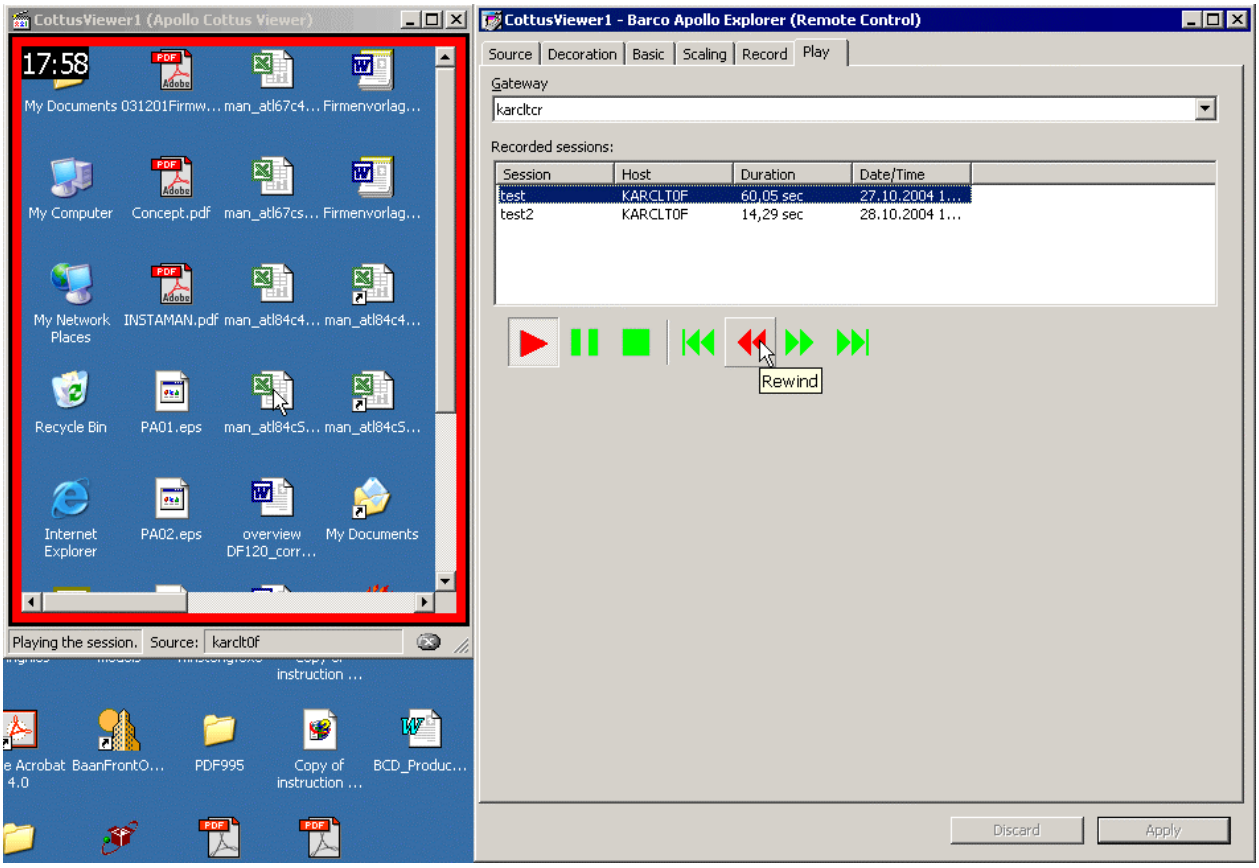
Click on the green button with the circle icon to start recording.

To stop recording, press the button with the square.

Recording will be stopped automatically after the defined period of the session length has been expired.

The session is stored on the gateway server. A typical desktop requires between 1 and 2 Mbytes per minute..

6.8.3.6 Play



A session which has been recorded can also be played back.

Select the **gateway server** where the session is stored.

Only gateway server which are listed in the viewersources.ini file can be selected. No unknown gateway server can be entered..

Subsequently a list with all stored sessions of this server is displayed, indicating the host which has been recorded, the duration and the date.

Select the desired session and click on the play button (arrow).

The session can be paused or stopped using the corresponding buttons.

You can also run forward or to the end.

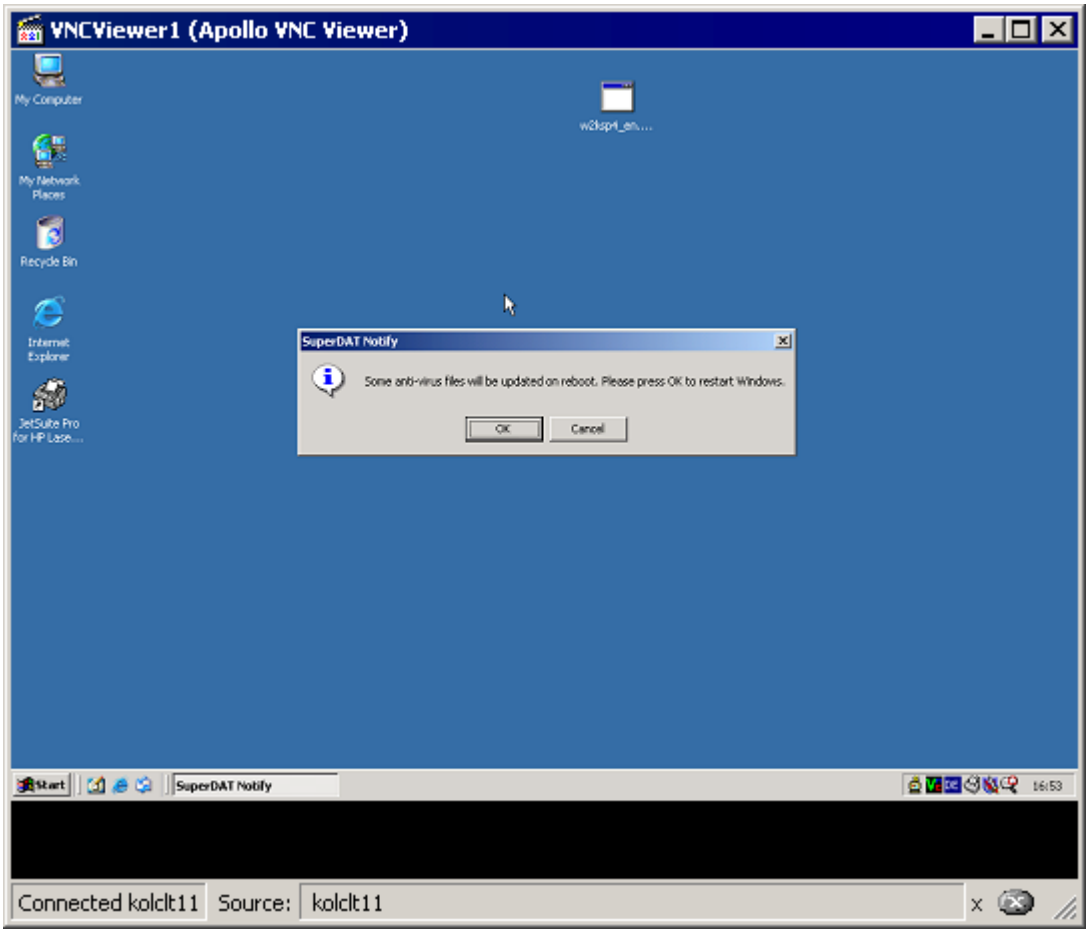
When a session is played back, the viewer automatically disconnects from a previously connected host.

If desired, the connection has to be re-established after the play back.

6.8.4 VNC Viewer

Use the **VNC Viewer** to view the screen of any workstation within the network.

Please mind that the color depth of the connected host has to match the client's color depth, cf. Steps required to configure the VNC Viewer



The viewer window does not contain any menu or tool bars. Viewers are controlled via the command interface (see Viewer command Interface) or the **Properties dialog box**.

6.8.4.1 VNC Viewer properties dialog box

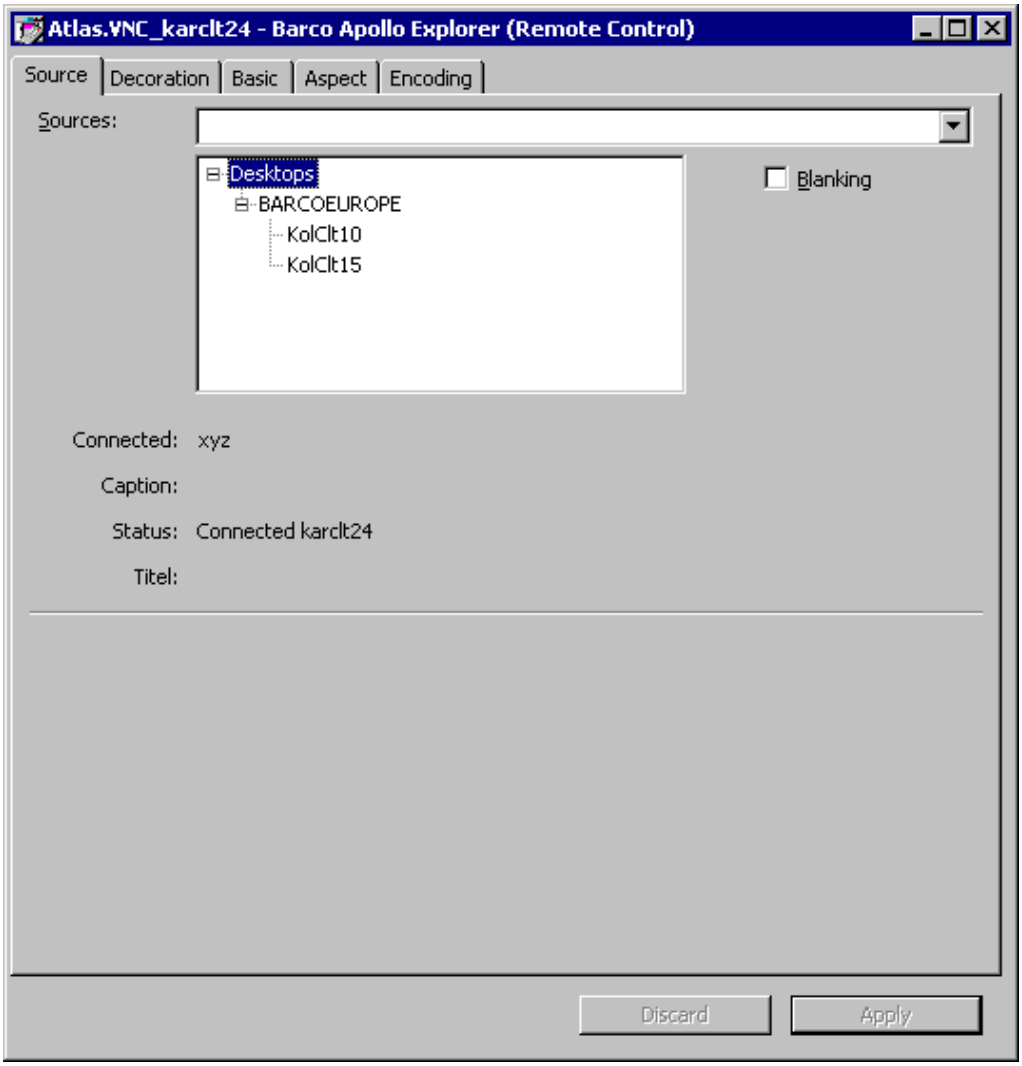
Open the properties dialog box of the viewer

- directly on the Display Wall using the shortcut key combination **CTRL+ALT+Enter**

or

- using the viewer's context menu (right mouse click on viewer name) in the **Apollo Explorer**, viewer category.
- double click on the mini window of the viewer in the **Apollo Explorer**

Close the dialog box with the shortcut key **Alt+F4** or by click on the **Close** button in the title bar.



A simple mouse click on the **Source** tab selects a workstation from a predefined list of sources.

The workstations listed in the selection list are defined in the ServerData\viewersources.ini file.

If a name has been assigned to this source, **SourceConnected** displays this name. **SourceCaption** shows the description entered in the **ServerDate\viewersources.ini** file.

An assigned title is depicted next to **Title**. **Status** refers to the status of the link with the source.

Select **Blanking** to hide the entire content of the linked desktop.

The depiction of the window content in hide mode can be selected from the Decoration tab.

All commands except the selection of a new workstation (from list box) are immediately sent to the associated viewer and applied.

General rule:

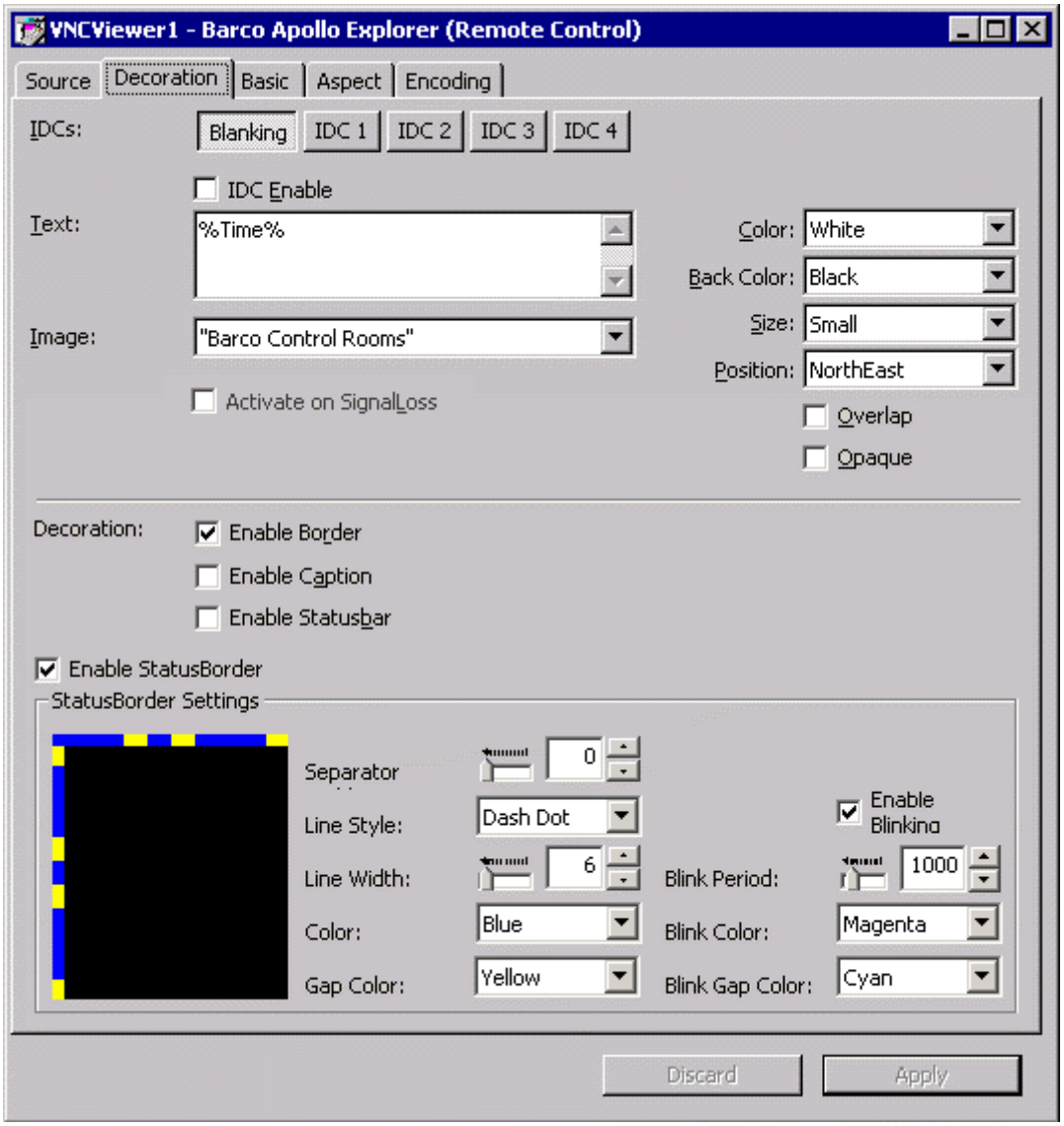
All entries into editable text fields (e.g., manual entries such as URLs) as well as the automatic name import (when selecting from list box) have to be confirmed with the Apply or cancelled with the Discard button.

6.8.4.2 Decoration

The **Decoration** tab is identical for all viewers. Here you can select whether to hide or show the title bar and/or status bar as well as the type and content of the information to be overlaid over the actual content of the viewer window.

If the entire window content is covered by an image, for example, the term used is **Blanking**.

If information is displayed covering only certain positions of the actual window, the term used is **In Display Caption** (IDC). You can define and activate up to 4 IDCs.



Click on **Blanking** (or **Idc1**, **Idc2**, **Idc3**, **Idc4**) to define the information to be depicted in the hide mode (information to be depicted as **IDC1**, **IDC2**, **IDC3**, **IDC4**). The information selected in blanking mode can also be displayed in case the signal is lost (check the option **Activate on SignalLoss**)

Then select the **IdcEnable** option to overlay the selected information over the actual viewer window content according to settings.

Information can consist of any text, system parameters such as date and time (cf. Placeholders for In Display Caption Texts), and an image (logo). The available images are defined in the **ServerData\Globals.ini** file and identical for all viewers. Colors and font sizes are defined in this file as well.

You can select text color, text background color, size, and position for **In Display Caption**. Click on the **Opaque** option and the text is displayed on the selected color; otherwise, the background is transparent. In case the **Overlap** checkbox is ticked, the IDC is displayed within the insertion. Remove the tick to have it displayed outside the insertion! Please note that **Overlap** has no effect in case the IDC is centered!

The logo is always positioned in the corners of the windows followed by the text unless **Center** is selected. Selecting the **Center** position always places the logo to the left of the text.

Changes in the text field are not effective unless the Apply button is clicked. All remaining settings are applied without additional confirmation.

The available IDC positions are as follows:

- Northwest (upper left)
- Northeast (upper right)
- Southwest (lower left)
- Southeast (lower right)
- Center (centered)
- Center North (centered at the top)
- Center South (centered at the bottom)

The **Center North** and **Center South** positions overlay a **banner**, i.e., the IDC covers the entire width of the viewer window. If a logo is part of this IDC it is displayed in the upper or left or bottom left corner.

An **In Display Caption** does not overlay the content of the viewer window until the IDC enable option has been activated. This option always refers to the currently clicked IDC button.

If several IDCs are activated simultaneously, they are aligned across the content of the viewer window in the order IDC1, IDC2, IDC3, IDC4. For example, if the position Northwest is selected for all IDCs, then IDC1 is depicted at the upper left, IDC2 below that, etc.

Title bar (**EnableCaption**) and status bar (**EnableStatusbar**) of the window can be hidden or shown. The title bar shows the **Ident** parameter of the viewer. The status bar lists the name or URL of the linked source as well as information about the downloading progress of the page.

In addition the **border** of the window can be enabled or disabled. If disabled, the caption is automatically disabled, too.

Without border, no caption can be displayed.

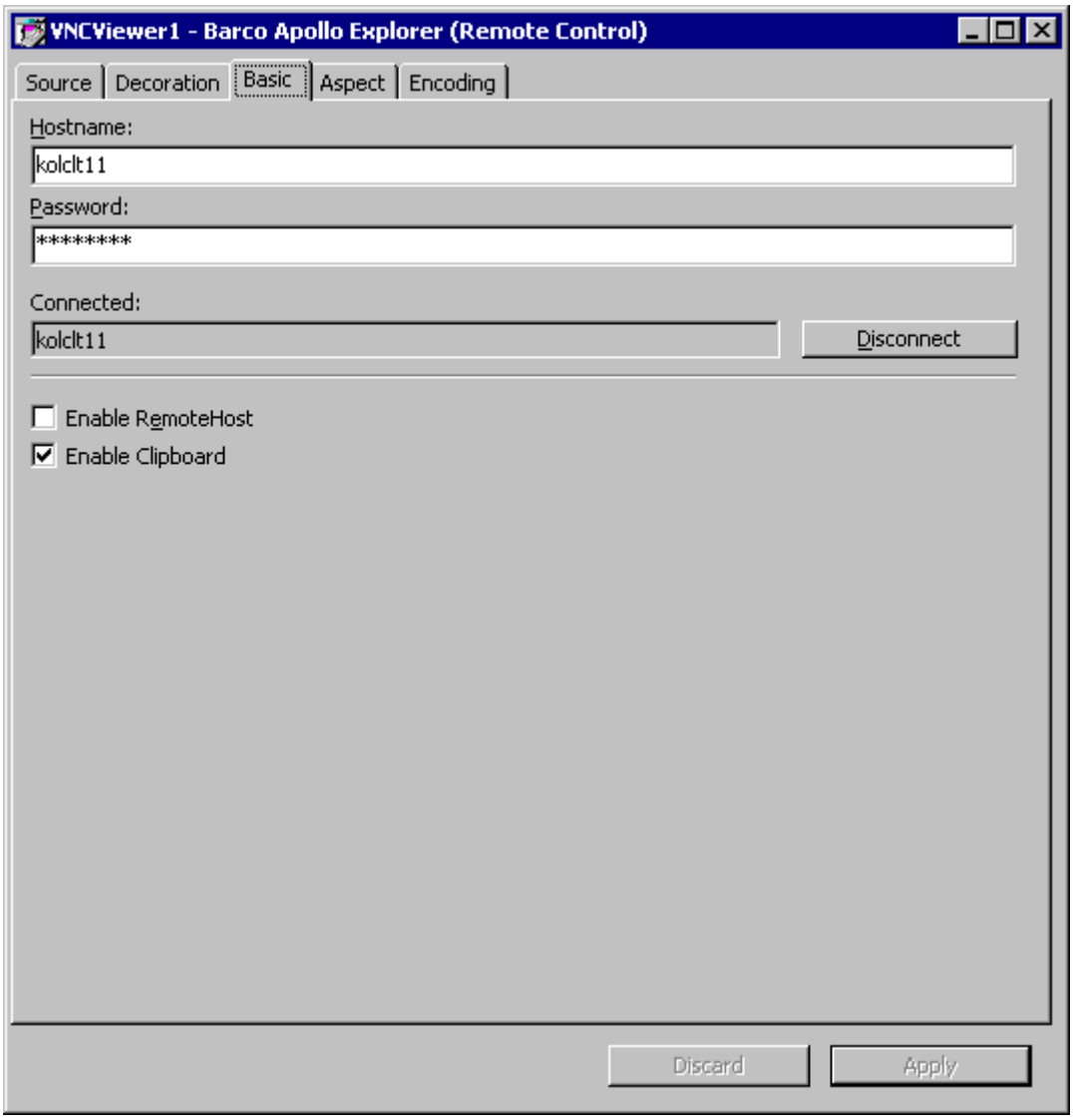
If the **StatusBorder** is enabled, the insertion is surrounded by a frame. The type of frame can be defined with regard to **Separator Width**, **Line Style**, **Line Width** and **Color**. In case Line Style is not solid, the gap color can also be defined.

This frame can be set static or blinking (**Enable Blinking**)

The frame is always surrounding the insertion. It is not surrounding the window!

All selections are immediately applied to the preview. To apply them also to the viewer window, click on **Apply**.

6.8.4.3 Basic

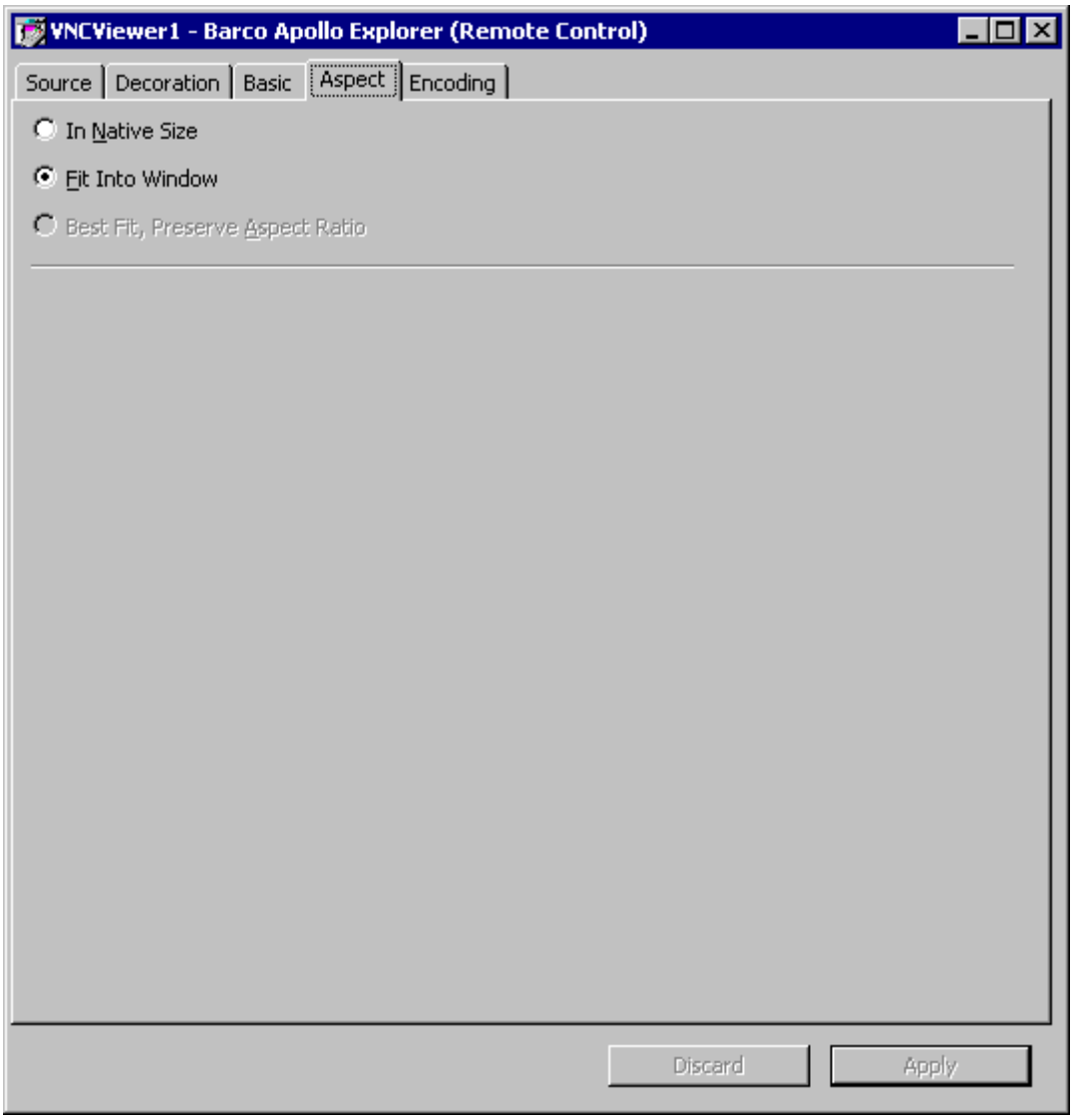


A server not listed on the selection list on the **Source** tab can be defined manually on the **Basic** tab. Enter the name of the server within the network (**Hostname**) as well as the (**Password**) to display the content of the associated screen. Click on **Apply** button to establish the connection with this server and to display its screen content in the viewer window. **Disconnect** removes the link between the host and the desktop server.

With the **EnableRemoteHost** option activated it is possible to execute mouse and keycard operations of the operator workstation on the host server.

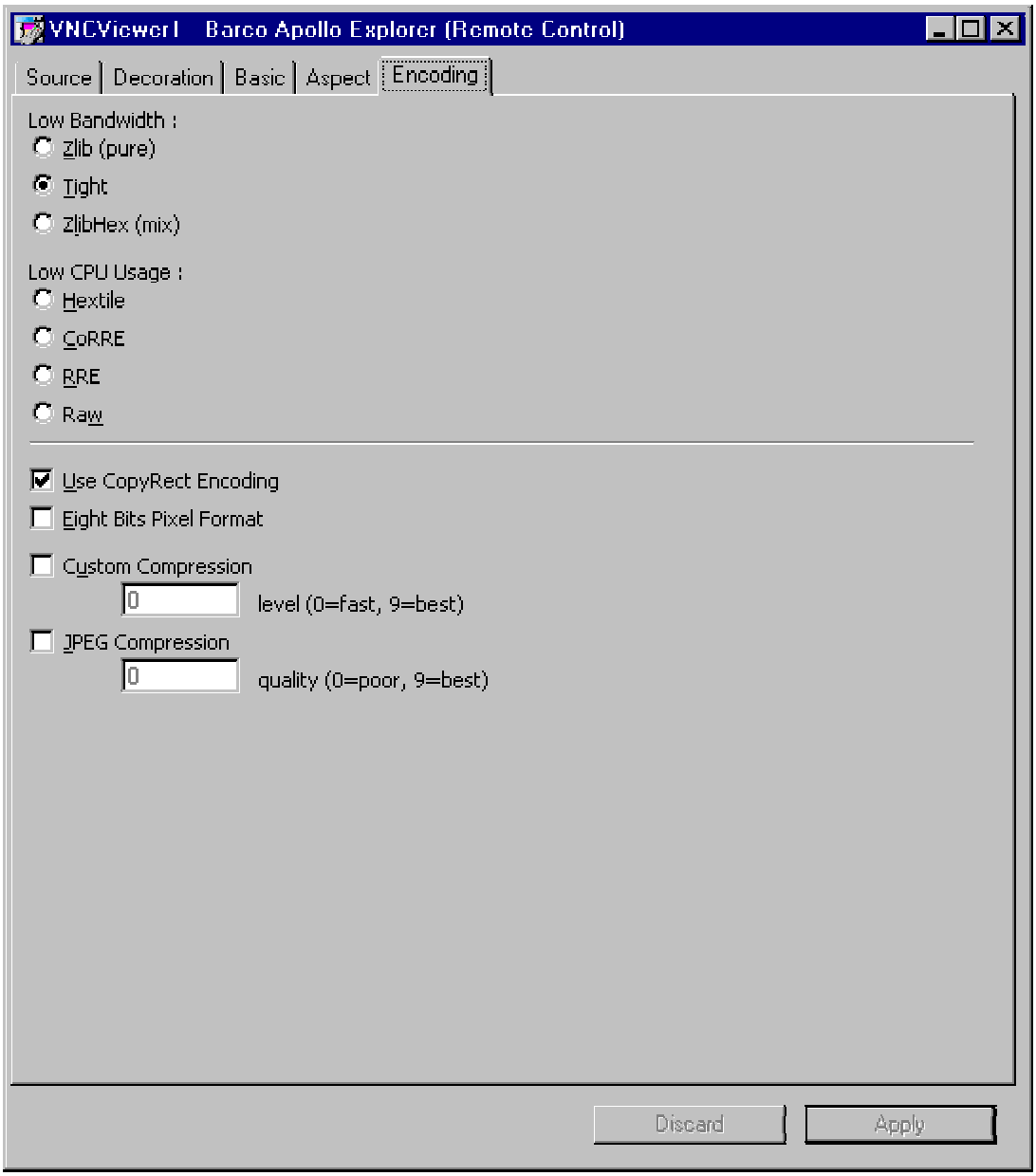
Enable Clipboard allows inserting the host's clipboard into the local application.

6.8.4.4 Aspect



Select **In Native Size** to display the content of the host workstation in the original resolution and aspect ratio or click **Fit into Window** to display the content in the viewer window.

6.8.4.5 Encoding

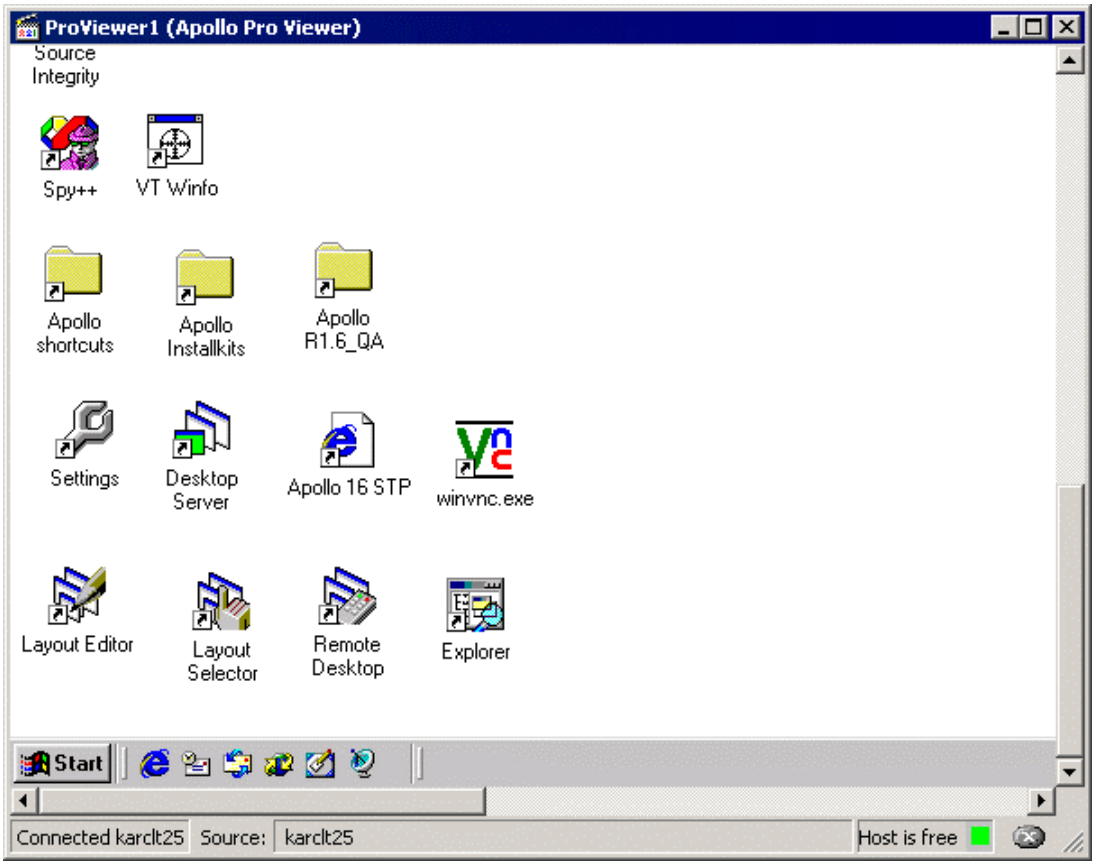


On this tab the encoding algorithm can be selected. This algorithm depends on the bandwidth and on the CPU usage.

6.8.5 ProViewer

Use the **ProViewer** to view the screen of any workstation within the network.

Please mind that the ProServer has to be installed on the workstation which screen should be viewed, cf. Steps required to configure the ProViewer



The viewer window does not contain any menu or tool bars. Viewers are controlled via the command interface (see Viewer command Interface) or the **Properties dialog box**.

6.8.5.1 Pro Viewer properties dialog box

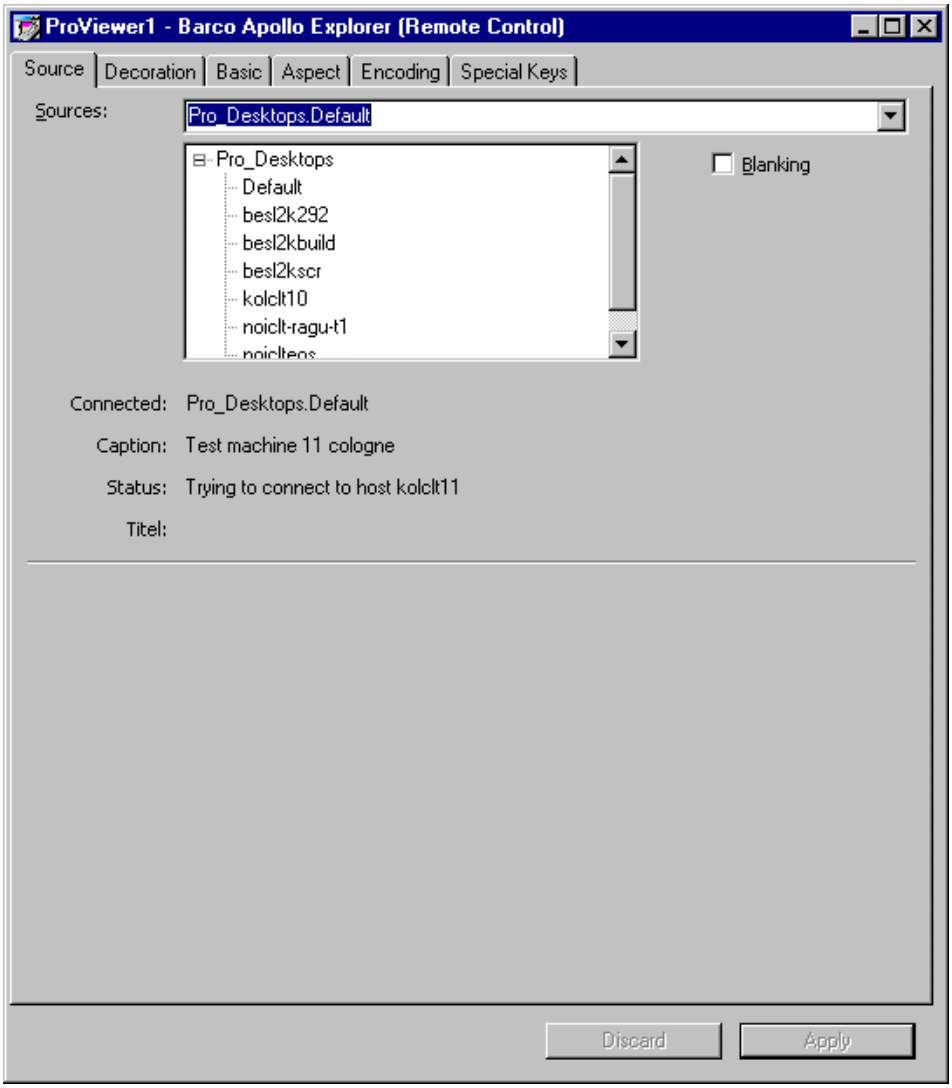
Open the properties dialog box of the viewer

- directly on the Display Wall using the shortcut key combination **CTRL+ALT+Enter**

or

- using the viewer's context menu (right mouse click on viewer name) in the **Apollo Explorer**, viewer category.
- double click on the mini window of the viewer in the **Apollo Explorer**

Close the dialog box with the shortcut key **Alt+F4** or by click on the **Close** button in the title bar.



A simple mouse click on the **Source** tab selects a workstation from a predefined list of sources.

The workstations listed in the selection list are defined in the ServerData\viewersources.ini file.

If a name has been assigned to this source, **SourceConnected** displays this name. **SourceCaption** shows the description entered in the **ServerDate\viewersources.ini** file.

An assigned title is depicted next to **Title**. **Status** refers to the status of the link with the source.

Select **Blanking** to hide the entire content of the linked desktop.

The depiction of the window content in hide mode can be selected from the Decoration tab.

All commands except the selection of a new workstation (from list box) are immediately sent to the associated viewer and applied.

General rule:

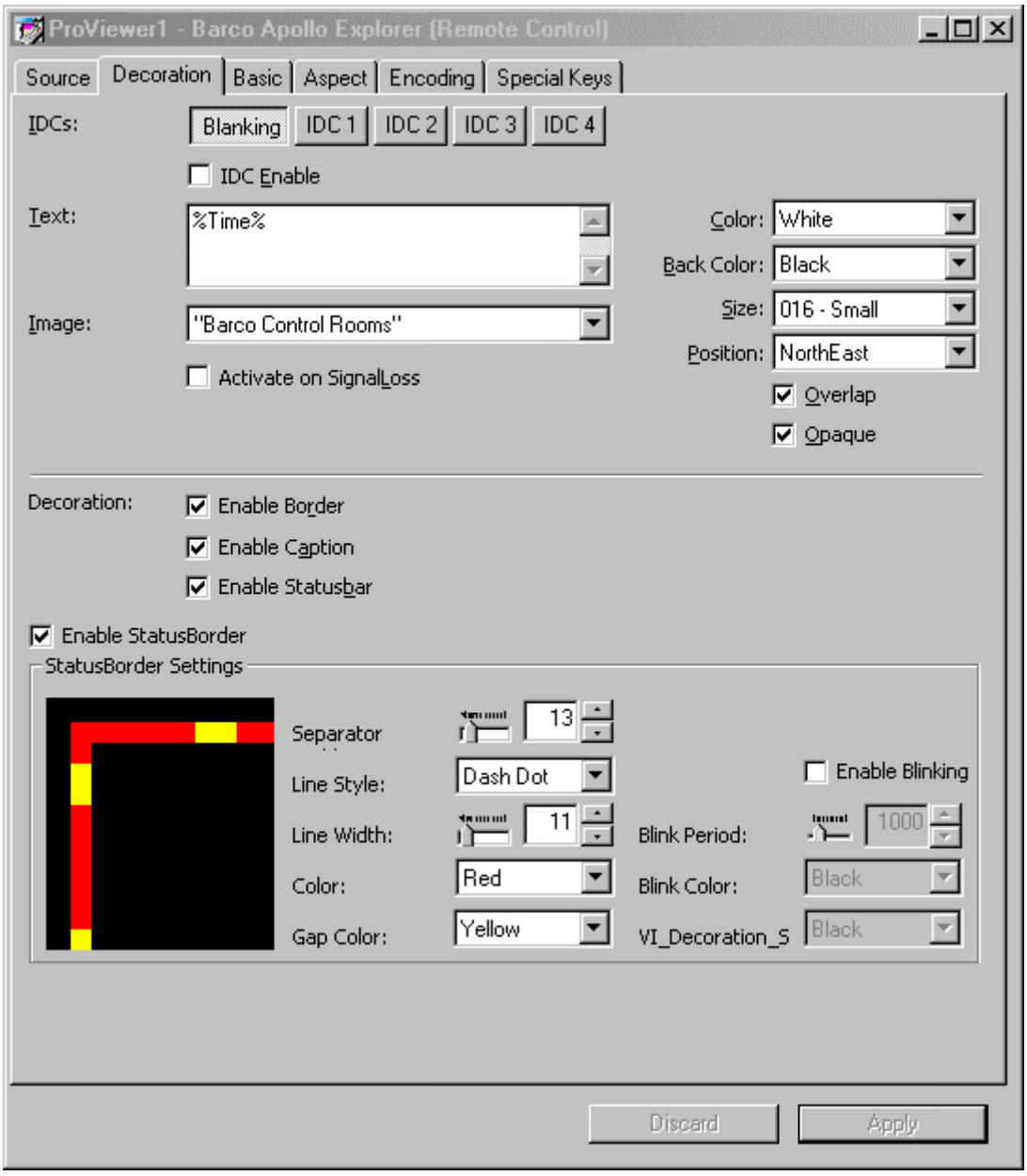
All entries into editable text fields (e.g., manual entries such as URLs) as well as the automatic name import (when selecting from list box) have to be confirmed with the Apply or cancelled with the Discard button.

6.8.5.2 Decoration

The **Decoration** tab is identical for all viewers. Here you can select whether to hide or show the title bar and/or status bar as well as the type and content of the information to be overlaid over the actual content of the viewer window.

If the entire window content is covered by an image, for example, the term used is **Blanking**.

If information is displayed covering only certain positions of the actual window, the term used is **In Display Caption** (IDC). You can define and activate up to 4 IDCs.



Click on **Blanking** (or **Idc1**, **Idc2**, **Idc3**, **Idc4**) to define the information to be depicted in the hide mode (information to be depicted as **IDC1**, **IDC2**, **IDC3**, **IDC4**). The information selected in blanking mode can also be displayed in case the signal is lost (check the option **Activate on SignalLoss**)

Then select the **IdcEnable** option to overlay the selected information over the actual viewer window content according to settings.

Information can consist of any text, system parameters such as date and time (cf. Placeholders for In Display Caption Texts), and an image (logo). The available images are defined in the **ServerData\Globals.ini** file and identical for all viewers. Colors and font sizes are defined in this file as well.

You can select text color, text background color, size, and position for **In Display Caption**. Click on the **Opaque** option and the text is displayed on the selected color; otherwise, the background is transparent. In case the **Overlap** checkbox is ticked, the IDC is displayed within the insertion. Remove the tick to have it displayed outside the insertion! Please note that **Overlap** has no effect in case the IDC is centered!

The logo is always positioned in the corners of the windows followed by the text unless **Center** is selected. Selecting the **Center** position always places the logo to the left of the text.

Changes in the text field are not effective unless the Apply button is clicked. All remaining settings are applied without additional confirmation.

The available IDC positions are as follows:

- Northwest (upper left)
- Northeast (upper right)
- Southwest (lower left)
- Southeast (lower right)
- Center (centered)
- Center North (centered at the top)
- Center South (centered at the bottom)

The **Center North** and **Center South** positions overlay a **banner**, i.e., the IDC covers the entire width of the viewer window. If a logo is part of this IDC it is displayed in the upper or left or bottom left corner.

An **In Display Caption** does not overlay the content of the viewer window until the IDC enable option has been activated. This option always refers to the currently clicked IDC button.

If several IDCs are activated simultaneously, they are aligned across the content of the viewer window in the order IDC1, IDC2, IDC3, IDC4. For example, if the position Northwest is selected for all IDCs, then IDC1 is depicted at the upper left, IDC2 below that, etc.

Title bar (**EnableCaption**) and status bar (**EnableStatusbar**) of the window can be hidden or shown. The title bar shows the **Ident** parameter of the viewer. The status bar lists the name or URL of the linked source as well as information about the downloading progress of the page.

In addition the **border** of the window can be enabled or disabled. If disabled, the caption is automatically disabled, too.

Without border, no caption can be displayed.

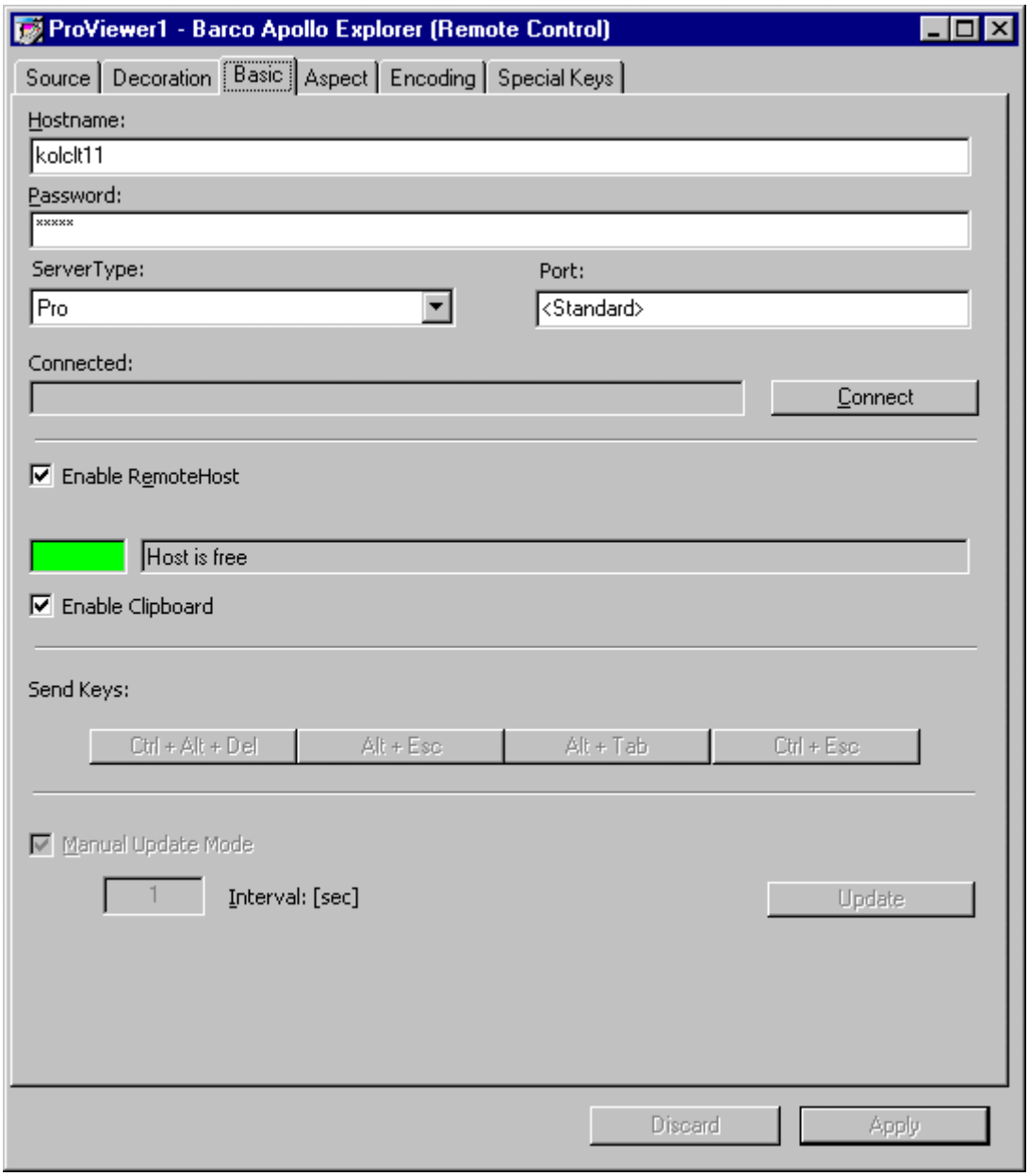
If the **StatusBorder** is enabled, the insertion is surrounded by a frame. The type of frame can be defined with regard to **Separator Width**, **Line Style**, **Line Width** and **Color**. In case Line Style is not solid, the gap color can also be defined.

This frame can be set static or blinking (**Enable Blinking**)

The frame is always surrounding the insertion. It is not surrounding the window!

All selections are immediately applied to the preview. To apply them also to the viewer window, click on **Apply**.

6.8.5.3 Basic



A server not listed on the selection list on the **Source** tab can be defined manually on the **Basic** tab. Enter the name of the server within the network (**Hostname**) as well as the **Password** to display the content of the associated screen. Click on **Apply** button to establish the connection with this server and to display its screen content in the viewer window. **Disconnect** removes the link between the host and the desktop server.

With the **EnableRemoteHost** option activated it is possible to execute mouse and keycard operations of the operator workstation on the host server.

Enable Clipboard allows inserting the host's clipboard into the local application.

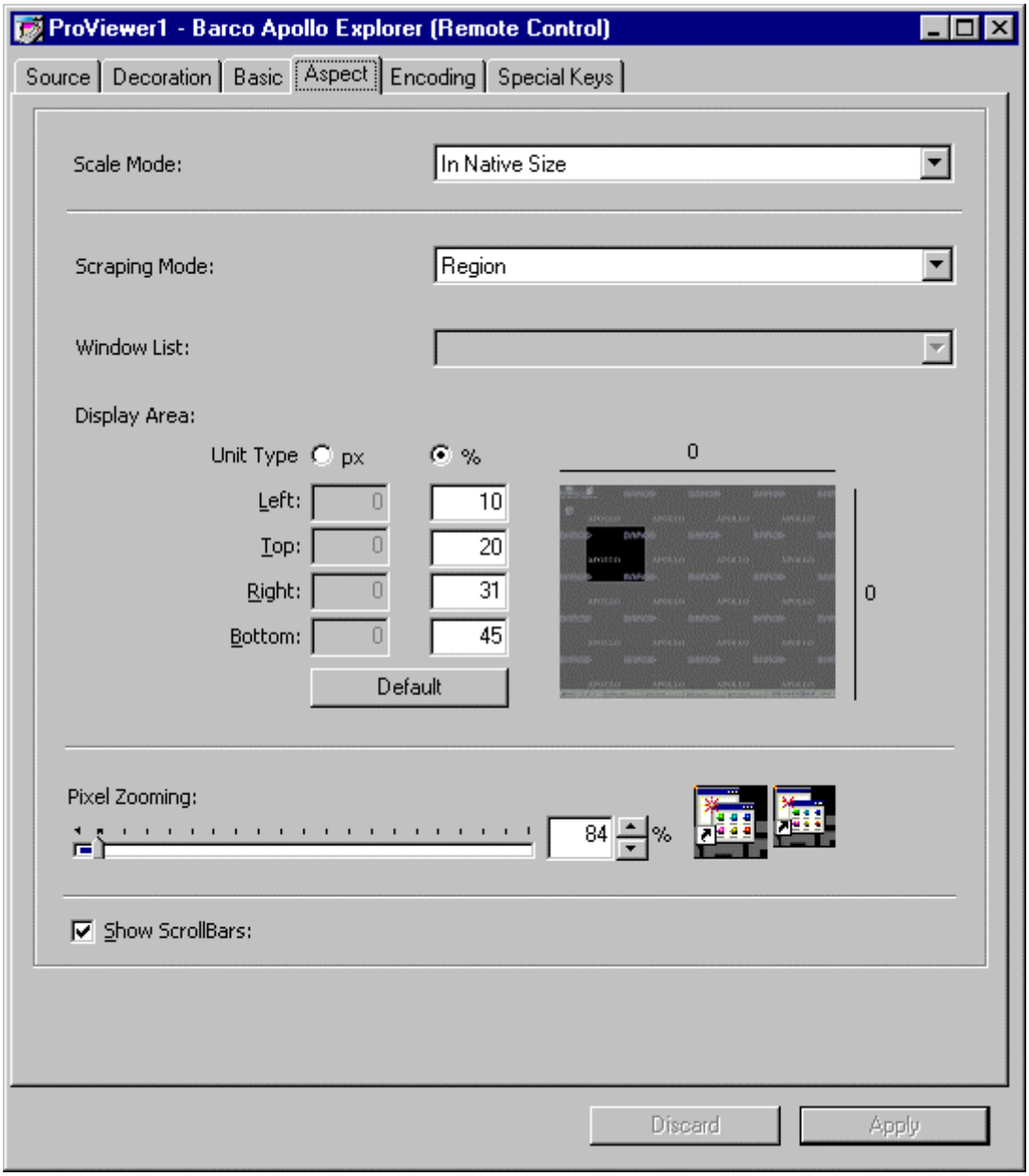
By looking at the Host Ownership you are informed if you can connect to the host or if this host is already connected to someone else.

A host can only be connected to one client!

In case there has been a reboot on the host workstation and Windows ask to enter CTRL+ALT+DEL to log in, these keys cannot be send remotely. Therefore a button to send the **CTRL+ALT+DEL** command has been implemented. After this command has been sent, all further actions can be done remotely.

Check **Manual Update Mode** to be able to specify the time interval and to enable the **Update** button. This will update the desktop content either immediately (click on **Update**) or within the specified intervals. If **Manual Update Mode** is not checked, the update will be done automatically (depends on content, can be in intervals of milliseconds, resulting in a big load on the bus).

6.8.5.4 Aspect



Select on of the **scale modes**: **In Native Size** to display the scraped content of the host workstation in the original resolution and aspect ratio or click **Fit into Window** to display the content in the viewer window.

Select the option **Best Fit, Preserve Aspect Ratio** to display the screen contents without distortions in the viewer window.

To adjust the window according the source, select **Fit Window To Source**.

ProViewer offers three different **scraping modes**: **FullScreen** (the entire desktop is scraped), **Window** (only a specific window is scraped, the windows of the currently launched applications are listed in the Window List box), or **Region.**

These options have to be selected first and applied. Subsequently these options can be specified in detail.

Select a **Window** from the list box. It's content will be scraped.

Only windows which window state is NOT minimized are listed in the list box.

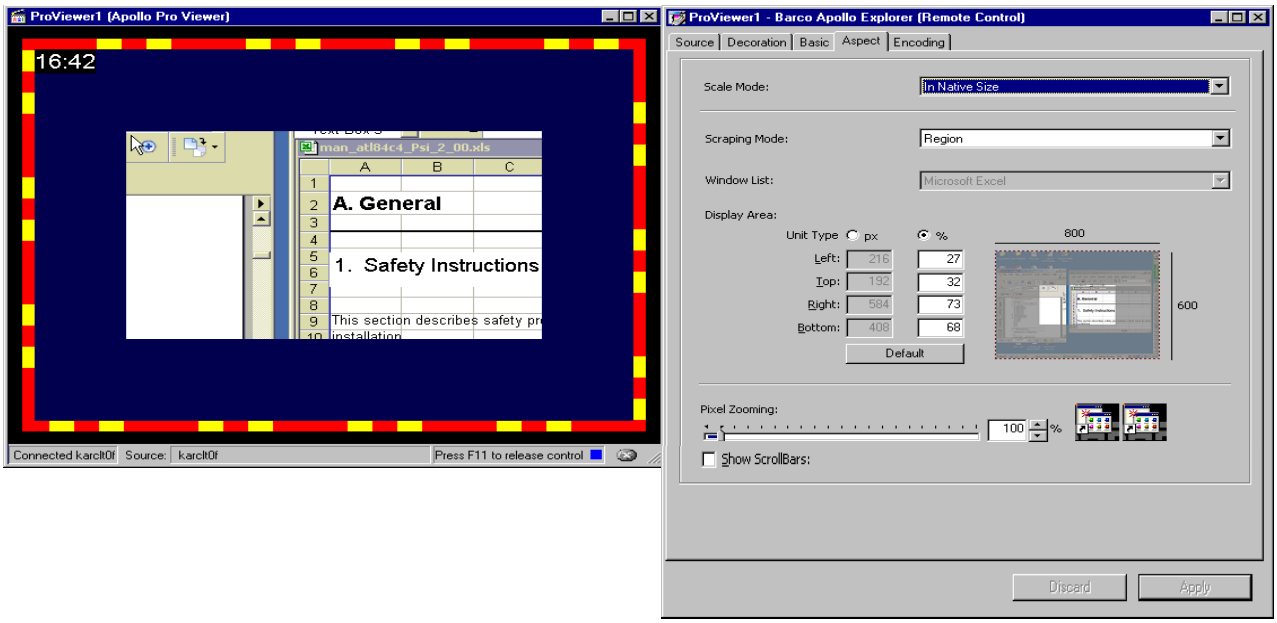
Windows NT: 'DOS' / 'command line' windows are not listed in the window list.

In case a window which is selected to be scraped is overlayed on the host workstation by another window, the scraped area has the dimensions of the orignal window but the information of the topmost window.

By means of the **Region** option a part of the host desktop can be selected for being scraped: define this part in the desktop representative in the **Scraping Layout** frame by drawing up a rectangle of the desired scraping area.

The size of this area is indicated in the **Display Area**, either **In Pixel** or **In Percent**.

Of course it also works the other way round: define a size (**In Pixel** or **In Percent**), and the scraping rectangle in the display representative is adjusted accordingly.



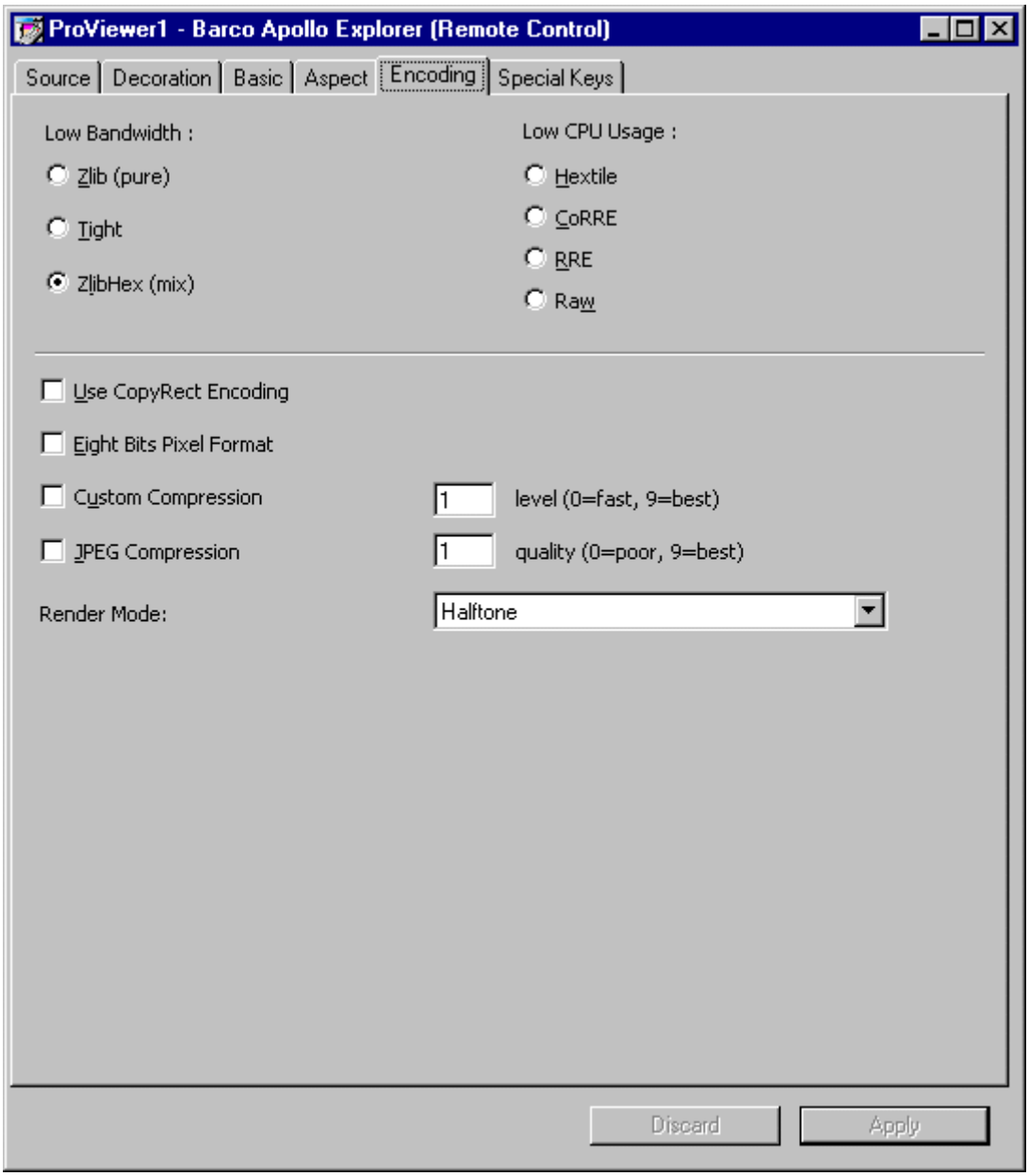
Starting with Apollo 1.8 the preview shows the actual content of the desktop.

The display area can be enlarged using **Pixel Zooming**.

The settings are saved automatically.

Confirm all your selections by clicking on the Apply button! In case this button is not clicked, the selections are not applied. When switching between the multiple tabs, and having not clicked the Apply button, your are asked if your commands are to be applied or not.

6.8.5.5 Encoding

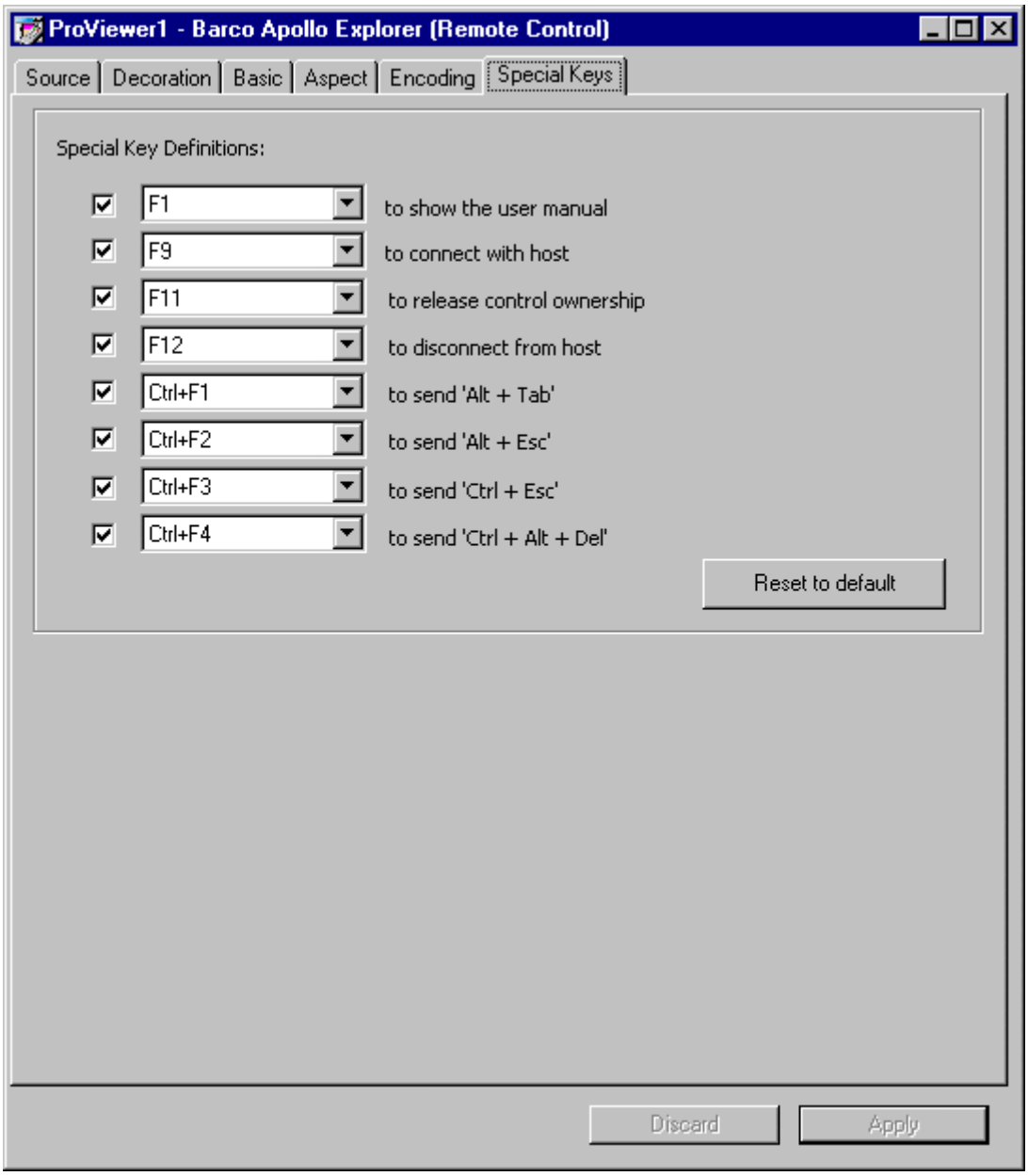


On this tab the encoding algorithm can be selected. This algorithm depends on the bandwidth and on the CPU usage.

The render mode can be set to **ColorOnColor** (default), **WhiteOnBlack**, **BlackOnWhite** and **Halftone**.

This option optimizes the display of a scaled source and depend on the current source. Just try which render mode return the best result for the specific source.

6.8.5.6 Special keys



Since Apollo Rel. 1.9 the ProViewer supports customizable hot keys to show the user manual, to connect, to release control, to disconnect, to send ALT+ESC to the server, to send ALT+TAB to the server, to send CTRL+ESC to the server, and to send CTRL+ALT+DEL to the server.

This hotkeys can be set and enabled/disabled on the property page Special keys.

Each hotkey definition can be freely chosen from the following predefined entries:

F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12;

CTRL+F1, CTRL+F2, CTRL+F3, CTRL+F4, CTRL+F5, CTRL+F6, CTRL+F7, CTRL+F8, CTRL+F9, CTRL+F10, CTRL+F11, CTRL+F12

If the checkbox leading a hotkey definition is ticked, this hotkey is enabled. If it is unchecked, the hotkey is disabled. The Viewer will only process enabled hotkey combinations!

A hotkey combination can only be used once. Trying to apply duplicates for different hotkeys will be rejected.

Changing hotkey combinations have to be confirmed by pressing the Apply button. Otherwise they are not valid.

Use the button "Reset to default" to apply the default settings for all hotkeys. This will result in the following settings:

Description	Hotkey	Enabled
ShowUserManual	F1	Enabled
Connect	F9	Enabled
ReleaseControl	F11	Enabled
Disconnect	F12	Enabled
ALT+Tab	CTRL+F1	Enabled
ALT+ESC	CTRL+F2	Enabled
CTRL+ESC	CTRL+F3	Enabled
CTRL+ALT+DEL	CTRL+ALT+F4	enabled

6.8.6 Web Viewer

Use the **Web Viewer** to view Internet pages.

The viewer window does not contain any menu or tool bars. Viewers are controlled via the command line interface (cf.Viewer command Interface) or the **Properties dialog box**.

6.8.6.1 Web Viewer properties dialog box

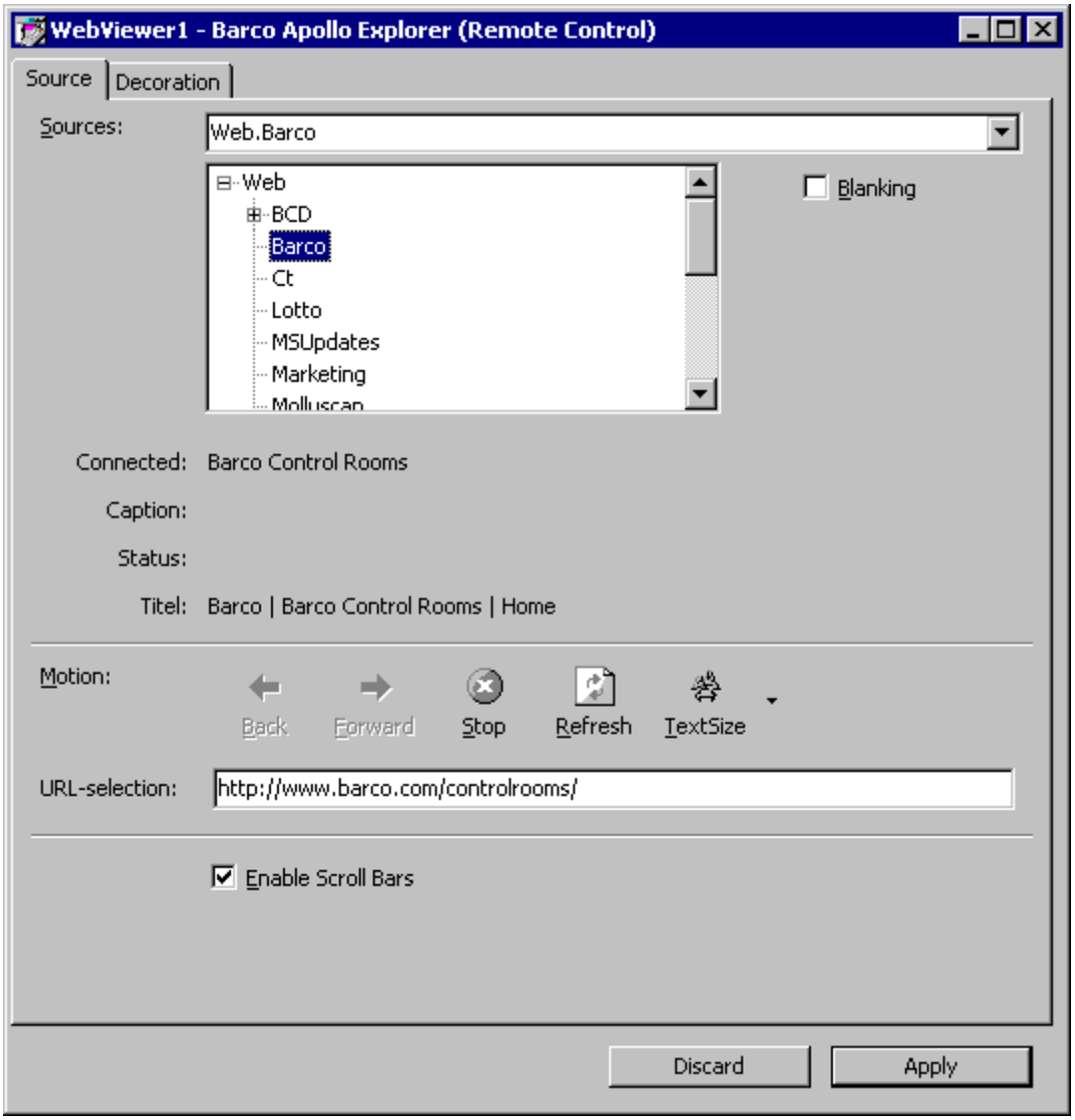
Open the properties dialog box of the Web Viewer

- directly on the display wall using the shortcut key combination **CTRL+ALT+Enter**

or

- using the viewer's context menu (right mouse click on viewer name) in the **Apollo Explorer**, viewer category.
- double click on the mini window of the viewer in the **Apollo Explorer**

Close the dialog box with the shortcut key **Alt+F4** or by click on the **Close** button in the title bar.



A simple mouse click on the **Source** tab selects and opens a Web address from a predefined list of sources or you can enter a **URL** directly.

The Internet pages listed in the selection list as well as the associated URLs and addresses are defined in the ServerData\viewersources.ini file.

If a name has been assigned to this source, **SourceConnected** displays this name. **SourceCaption** shows the description entered in the **ServerDate\viewersources.ini** file.

An assigned title is depicted next to **Title**. **Status** refers to the status of the link with the source.

Navigate with the **Back**, **Forward**, **Stop** buttons. Reload the page with **Refresh**. If the Internet pages support different font sizes, use the selection list to choose the desired **Text Size**.

The **Scroll Bars** can be enabled (visible) or hidden.

Some control elements are no longer visible if the dialog box size is reduced. Enlarge the dialog box until all control elements are again visible (drag with mouse).

Select **Blanking** to hide the entire content of the viewer window.

The depiction of the window content in blaniking mode can be selected from the Decoration tab.

All commands except the selection of a new Internet address (from list box or manual input of URL) are immediately sent to the associated viewer and applied.

General rule:

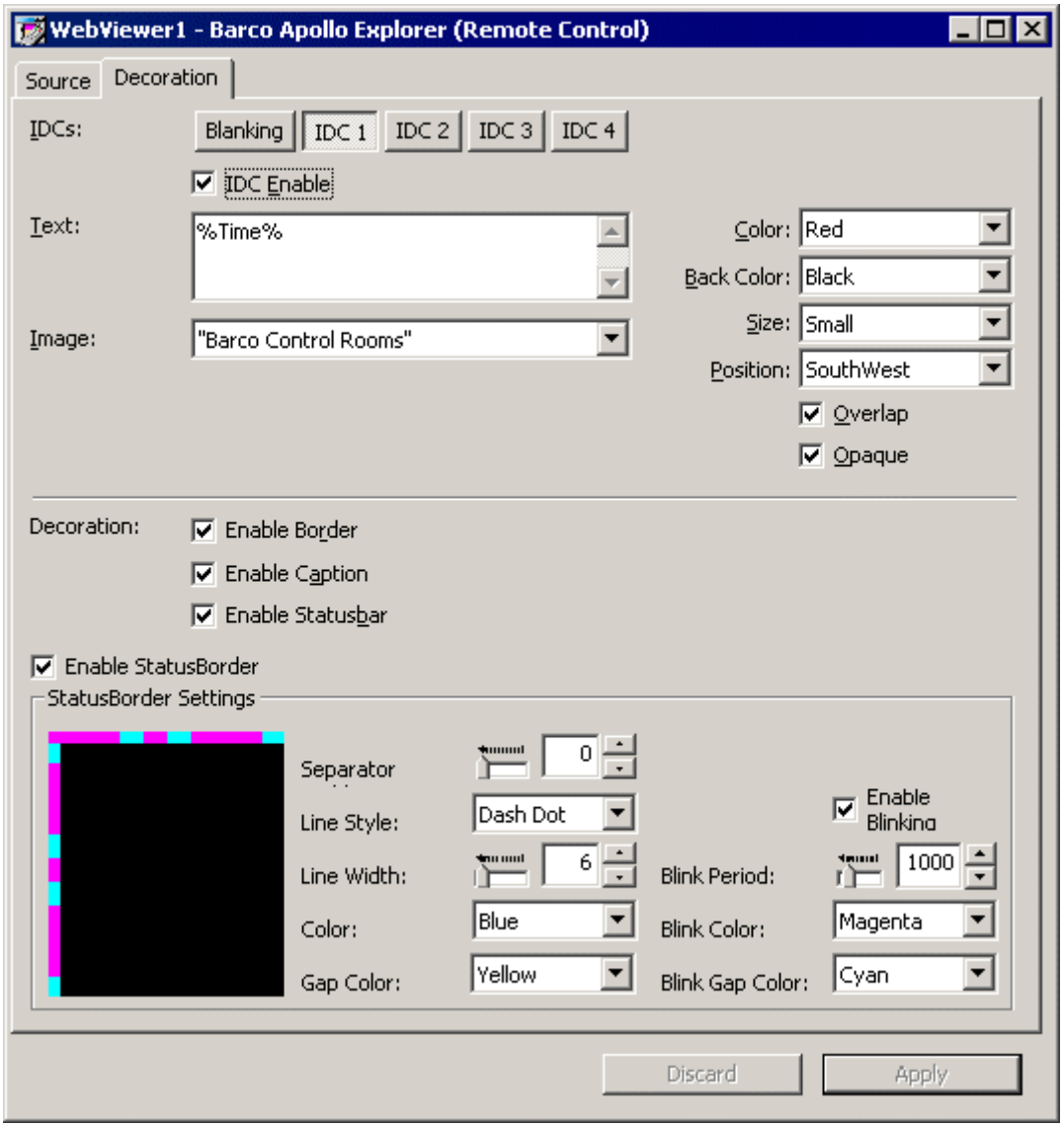
All entries into editable text fields (e.g., manual entries such as URLs) as well as the automatic name import (when selecting from list box) have to be confirmed with the Apply or cancelled with the Discard button.

6.8.6.2 Decoration

The **Decoration** tab is identical for all viewers. Here you can select whether to hide or show the title bar and/or status bar as well as the type and content of the information to be overlaid over the actual content of the viewer window.

If the entire window content is covered by an image, for example, the term used is **Blanking**.

If information is displayed covering only certain positions of the actual window, the term used is **In Display Caption** (IDC). You can define and activate up to 4 IDCs.



Click on **Blanking** (or **Idc1**, **Idc2**, **Idc3**, **Idc4**) to define the information to be depicted in the hide mode (information to be depicted as **IDC1**, **IDC2**, **IDC3**, **IDC4**).

Then select the **IdcEnable** option to overlay the selected information over the actual viewer window content according to settings.

Information can consist of any text, system parameters such as date and time (cf. Placeholders for In Display Caption Texts), and an image (logo). The available images are defined in the **ServerData\Globals.ini** file and identical for all viewers. Colors and font sizes are defined in this file as well.

You can select text color, text background color, size, and position for **In Display Caption**. Click on the **Opaque** option and the text is displayed on the selected color; otherwise, the background is transparent. In case the **Overlap** checkbox is ticked, the IDC is displayed within the insertion. Remove the tick to have it displayed outside the insertion! Please note that **Overlap** has no effect in case the IDC is centered!

The logo is always positioned in the corners of the windows followed by the text unless **Center** is selected. Selecting the **Center** position always places the logo to the left of the text.

Changes in the text field are not effective unless the Apply button is clicked. All remaining settings are applied without additional confirmation.

The available IDC positions are as follows:

- Northwest (upper left)
- Northeast (upper right)
- Southwest (lower left)
- Southeast (lower right)
- Center (centered)
- Center North (centered at the top)
- Center South (centered at the bottom)

The **Center North** and **Center South** positions overlay a **banner**, i.e., the IDC covers the entire width of the viewer window. If a logo is part of this IDC it is displayed in the upper or left or upper right corner.

An **In Display Caption** does not overlay the content of the viewer window until the IDC enable option has been activated. This option always refers to the currently clicked IDC button.

If several IDCs are activated simultaneously, they are aligned across the content of the viewer window in the order IDC1, IDC2, IDC3, IDC4. For example, if the position Northwest is selected for all IDCs, then IDC1 is depicted at the upper left, IDC2 below that, etc.

Title bar (**EnableCaption**) and status bar (**EnableStatusbar**) of the window can be hidden or shown. The title bar shows the **Ident** parameter of the viewer. The status bar lists the name or URL of the linked source as well as information about the downloading progress of the page.

In addition the border of the window can be enabled or disabled. If disabled, the caption is automatically disabled, too.

Without border, no caption can be displayed.

If the **StatusBorder** is enabled, the insertion is surrounded by a frame. The type of frame can be defined with regard to **Separator Width**, **Line Style**, **Line Width** and **Color**. In case Line Style is not solid, the gap color can also be defined.

This frame can be set static or blinking (**Enable Blinking**)

The frame is always surrounding the insertion. It is not surrounding the window!

All selections are immediately applied to the preview. To apply them also to the viewer window, click on **Apply**.

6.8.7 MPEG Viewer

Use the MPEG Viewer to view digital video.

The viewer window does not contain any menu or tool bars. Viewers are controlled via the command line interface (cf. Viewer command Interface) or the **Properties dialog box**.

6.8.7.1 MPEG Viewer properties dialog box

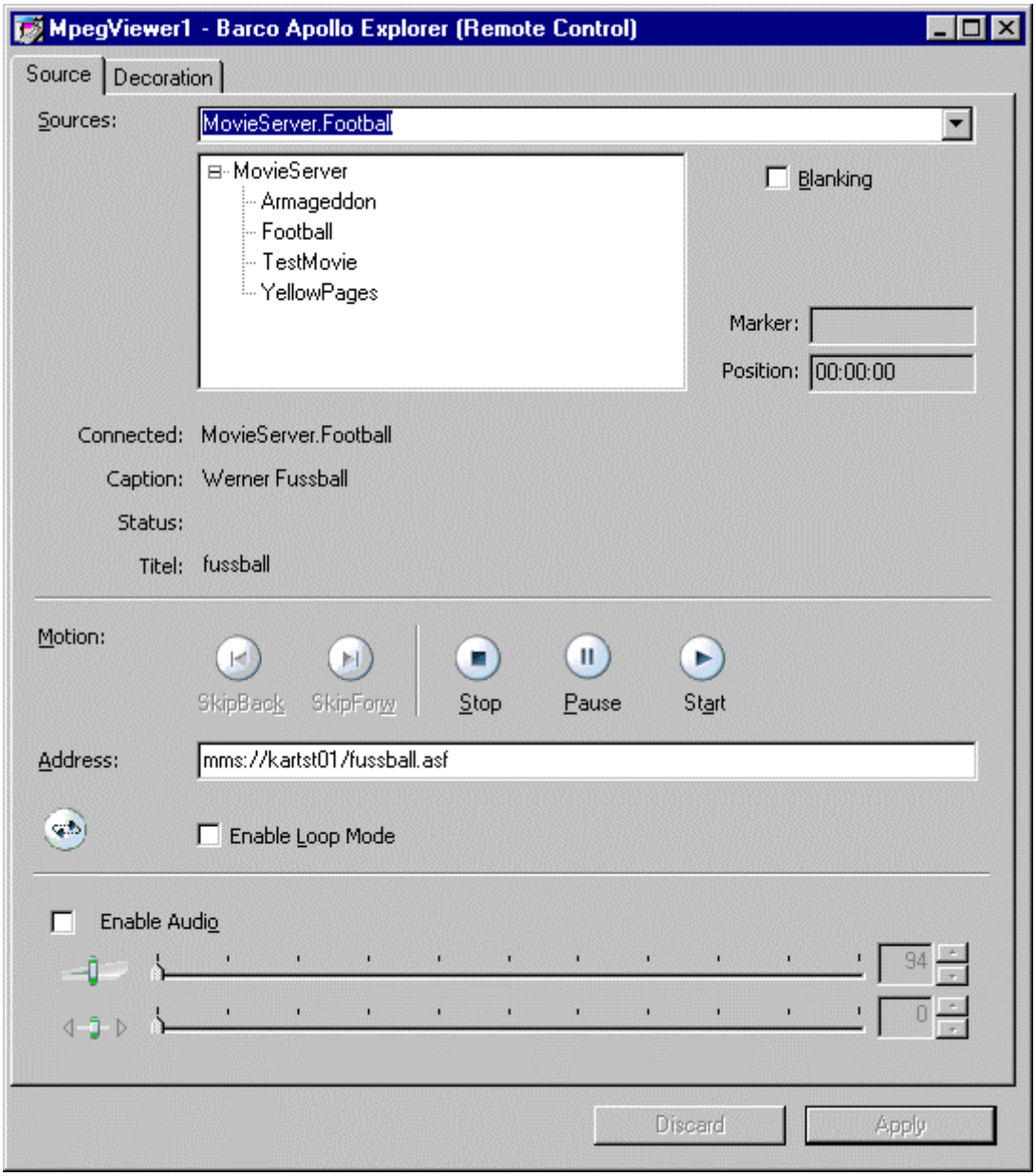
Open the properties dialog box of the viewer

- directly on the display wall using the shortcut key combination **CTRL+ALT+Enter**

or

- using the viewer's context menu (right mouse click on viewer name) in the **Apollo Explorer**, viewer category.
- double click on the mini window of the viewer in the **Apollo Explorer**

Close the dialog box with the shortcut key **Alt+F4** or by click on the **Close** button in the title bar.



A simple mouse click on the **Source** tab selects an address from a predefined quantity or you can open any video by entering the **URL** directly.

The videos listed in the selection list as well as the associated URLs and addresses are defined in the ServerData\viewersources.ini file.

If a name has been assigned to this source, **SourceConnected** displays this name. **SourceCaption** shows the description entered in the **ServerDate\viewersources.ini** file.

An assigned title is depicted next to **Title**. **Status** refers to the status of the link with the source.

Use **Start**, **Pause**, **Stop** for playback. Use **SkipBack** or **SkipForward** to jump to the previous or next marker. The name of the current marker and its position are shown in the fields with the same name.

If **Enable Loop Mode** is checked, the viewer restarts playing after the end of the stream has been reached.

If no markers are defined for the data stream, the **SkipBack** or **SkipForward** buttons are deactivated.

Check the **Audio** functionality to control **audio volume** and **audio balance**. Modify the settings by means of the sliders or of the spin buttons.

Audio is only active for one instance of the Mpeg Viewer. This instance also needs to have the focus on the Display Wall! Otherwise there is no sound available.

Some control elements are no longer visible if the dialog box size is reduced. Enlarge the dialog box until all control elements are again visible (drag with mouse).

Select **Blanking** to hide the entire content of the viewer window.

If you stop the video and then restart playback by clicking **Play**, the window remains gray until the **Blanking** option has been activated and then deactivated again.

The depiction of the window content in blanking mode can be selected from the Decoration tab.

All commands except the selection of a new video address (from list box or manual input of URL) are immediately sent to the associated viewer and applied.

General rule:

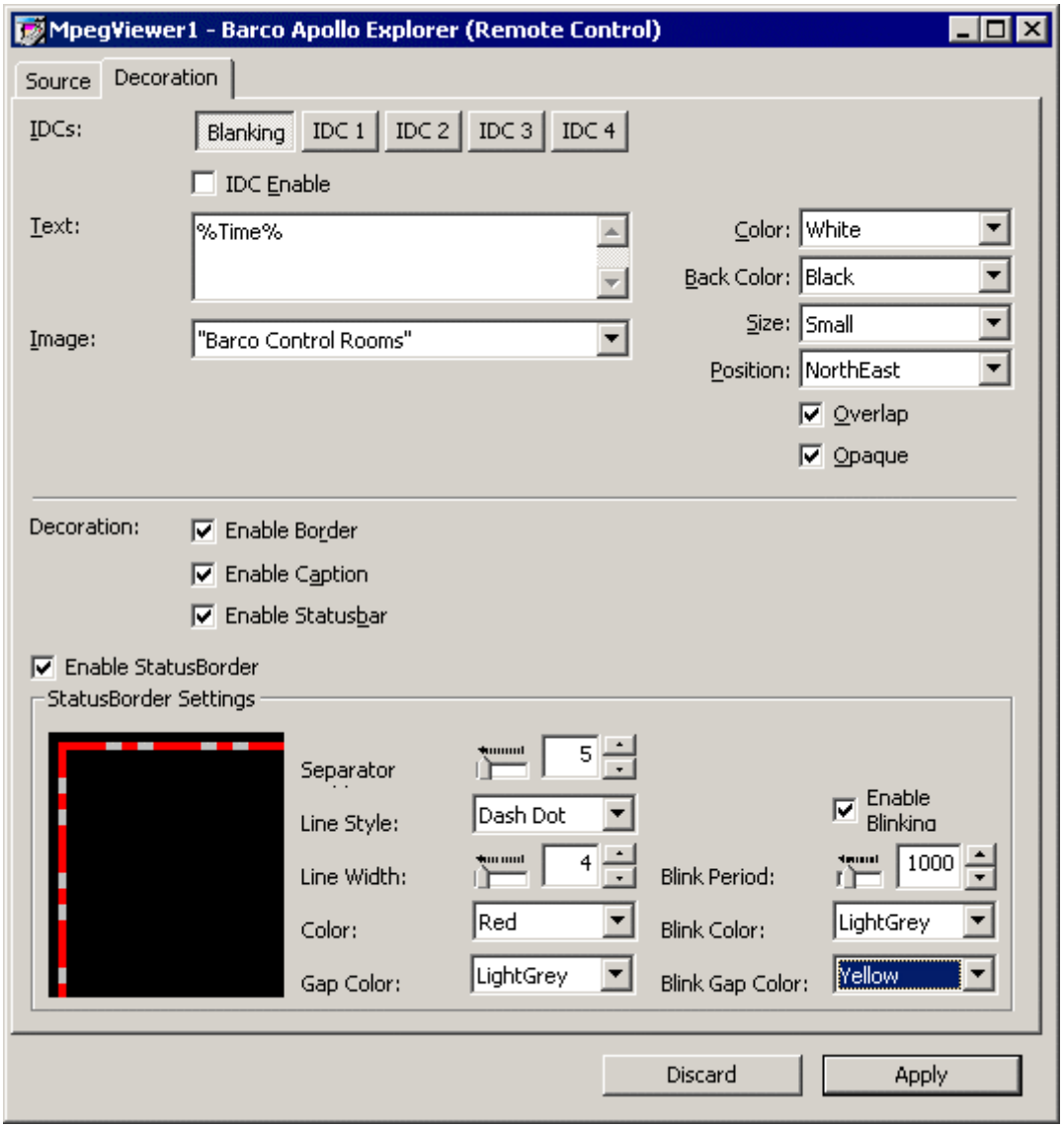
All entries into editable text fields (e.g., manual entries such as URLs) as well as the automatic name import (when selecting from list box) have to be confirmed with the Apply or cancelled with the Discard button.

6.8.7.2 Decoration

The **Decoration** tab is identical for all viewers. Here you can select whether to hide or show the title bar and/or status bar as well as the type and content of the information to be overlaid over the actual content of the viewer window.

If the entire window content is covered by an image, for example, the term used is **Blanking**.

If information is displayed covering only certain positions of the actual window, the term used is **In Display Caption** (IDC). You can define and activate up to 4 IDCs.



Click on **Blanking** (or **Idc1**, **Idc2**, **Idc3**, **Idc4**) to define the information to be depicted in the hide mode (information to be depicted as **IDC1**, **IDC2**, **IDC3**, **IDC4**).

Then select the **IdcEnable** option to overlay the selected information over the actual viewer window content according to settings.

Information can consist of any text, system parameters such as date and time (cf. Placeholders for In Display Caption Texts), and an image (logo). The available images are defined in the **ServerData\Globals.ini** file and identical for all viewers. Colors and font sizes are defined in this file as well.

You can select text color, text background color, size, and position for **In Display Caption**. Click on the **Opaque** option and the text is displayed on the selected color; otherwise, the background is transparent. In case the **Overlap** checkbox is ticked, the IDC is displayed within the insertion. Remove the tick to have it displayed outside the insertion! Please note that **Overlap** has no effect in case the IDC is centered!

The logo is always positioned in the corners of the windows followed by the text unless **Center** is selected. Selecting the **Center** position always places the logo to the left of the text.

Changes in the text field are not effective unless the Apply button is clicked. All remaining settings are applied without additional confirmation.

The available IDC positions are as follows:

- Northwest (upper left)
- Northeast (upper right)
- Southwest (lower left)
- Southeast (lower right)
- Center (centered)
- Center North (centered at the top)
- Center South (centered at the bottom)

The **Center North** and **Center South** positions overlay a **banner**, i.e., the IDC covers the entire width of the viewer window. If a logo is part of this IDC it is displayed in the upper or left or upper right corner.

An **In Display Caption** does not overlay the content of the viewer window until the IDC enable option has been activated. This option always refers to the currently clicked IDC button.

If several IDCs are activated simultaneously, they are aligned across the content of the viewer window in the order IDC1, IDC2, IDC3, IDC4. For example, if the position Northwest is selected for all IDCs, then IDC1 is depicted at the upper left, IDC2 below that, etc.

Title bar (**EnableCaption**) and status bar (**EnableStatusbar**) of the window can be hidden or shown. The title bar shows the **Ident** parameter of the viewer. The status bar lists the name or URL of the linked source as well as information about the downloading progress of the page.

In addition the **border** of the window can be enabled or disabled. If disabled, the caption is automatically disabled, too.

Without border, no caption can be displayed.

If the **StatusBorder** is enabled, the insertion is surrounded by a frame. The type of frame can be defined with regard to **Separator Width**, **Line Style**, **Line Width** and **Color**. In case Line Style is not solid, the gap color can also be defined.

This frame can be set static or blinking (**Enable Blinking**)

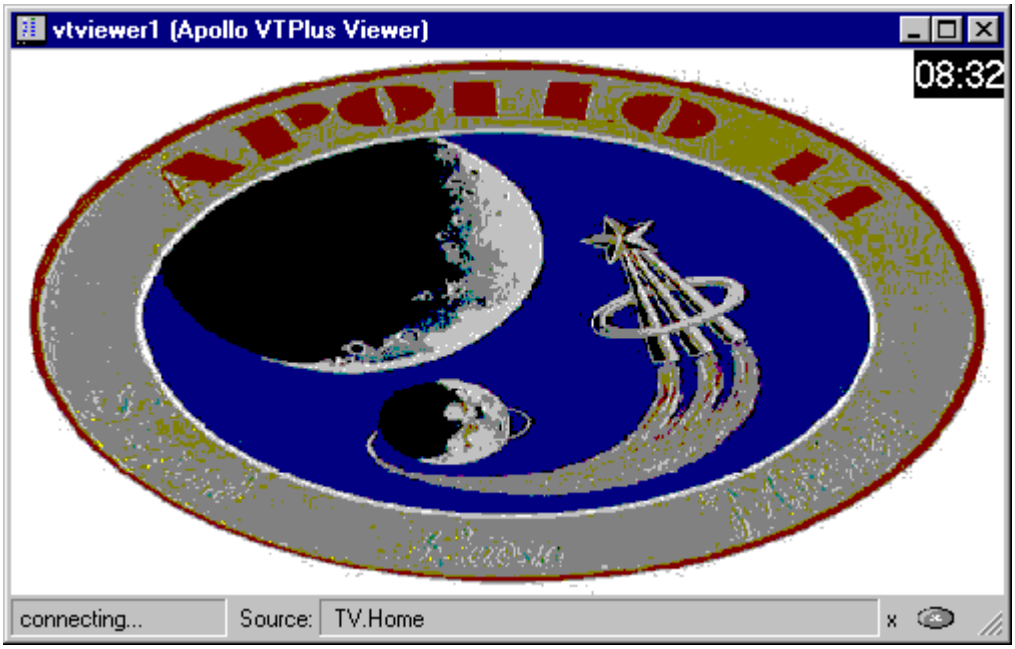
The frame is always surrounding the insertion. It is not surrounding the window!

All selections are immediately applied to the preview. To apply them also to the viewer window, click on **Apply**.

6.8.8 VTplus Viewer

Use the **VTplus Viewer** to view video text pages.

The Apollo VTplus Viewer support applies only to Hauppage hardware WinPC TV..



The viewer window does not contain any menu or tool bars. Viewers are controlled via the command line interface (see Viewer command Interface) or the **Properties dialog box**.

6.8.8.1 VTplus Viewer properties dialog box

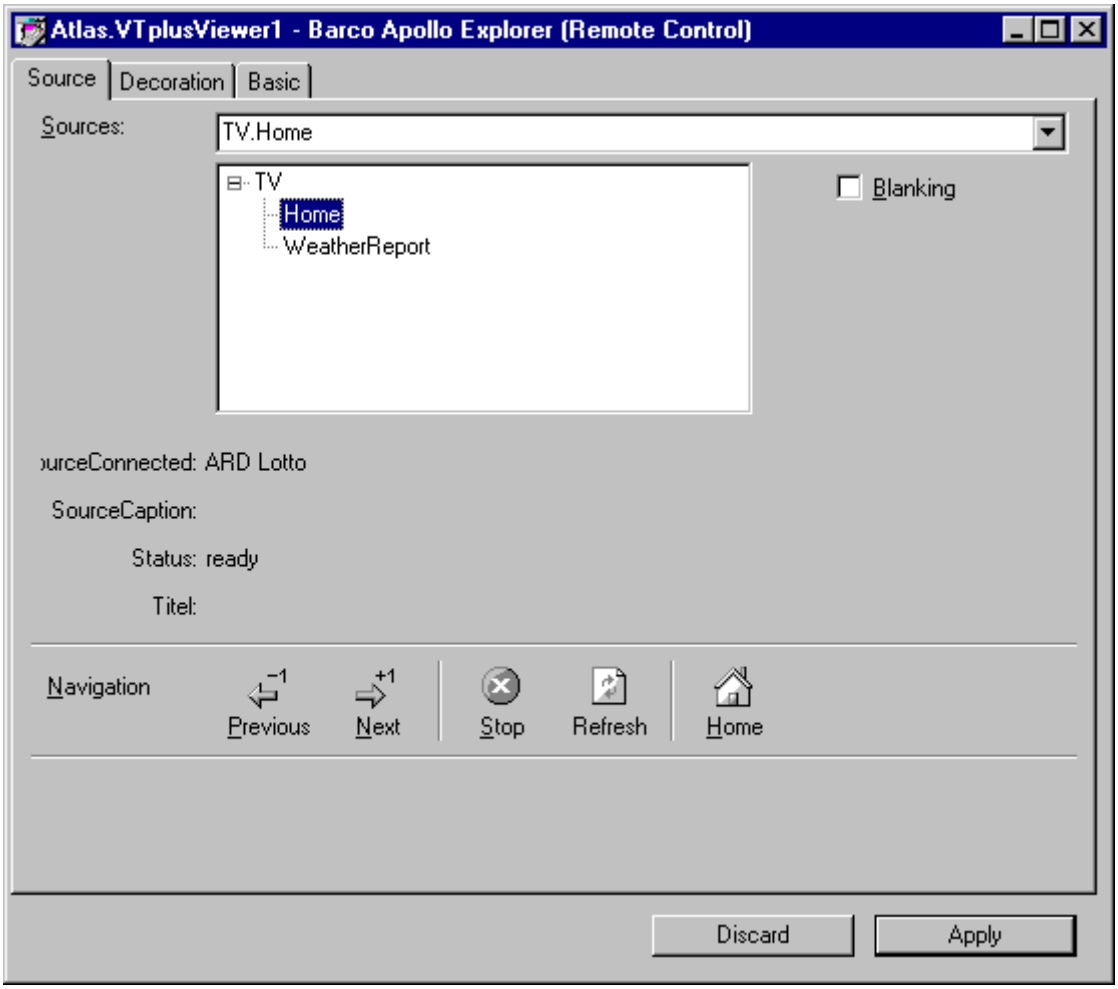
Open the properties dialog box of the viewer

- directly on the display wall using the shortcut key combination **CTRL+ALT+Enter**

or

- using the viewer's context menu (right mouse click on viewer name) in the **Apollo Explorer**, viewer category.
- double click on the mini window of the viewer in the **Apollo Explorer**

Close the dialog box with the shortcut key **Alt+F4** or by click on the **Close** button in the title bar.



A simple mouse click on the **Source** tab selects a video text page from a predefined list of sources.

The video text pages listed in the selection list as well as the associated broadcasting stations are defined in the ServerData\viewersources.ini file.

If a name has been assigned to this source, **SourceConnected** displays this name. **SourceCaption** shows the description entered in the **ServerDate\viewersources.ini** file.

An assigned title is depicted next to **Title**. **Status** refers to the status of the link with the source.

Navigate with the **Back**, **Forward**, **Stop** buttons. Reload the page with **Refresh**.

Some control elements are no longer visible if the dialog box size is reduced. Enlarge the dialog box until all control elements are again visible (drag with mouse).

Select **Blanking** to hide the entire content of the video text page window.

The depiction of the window content in blanking mode can be selected from the Decoration tab.

All commands except the selection of a videotext page (from list box) are immediately sent to the associated viewer and applied.

General rule:

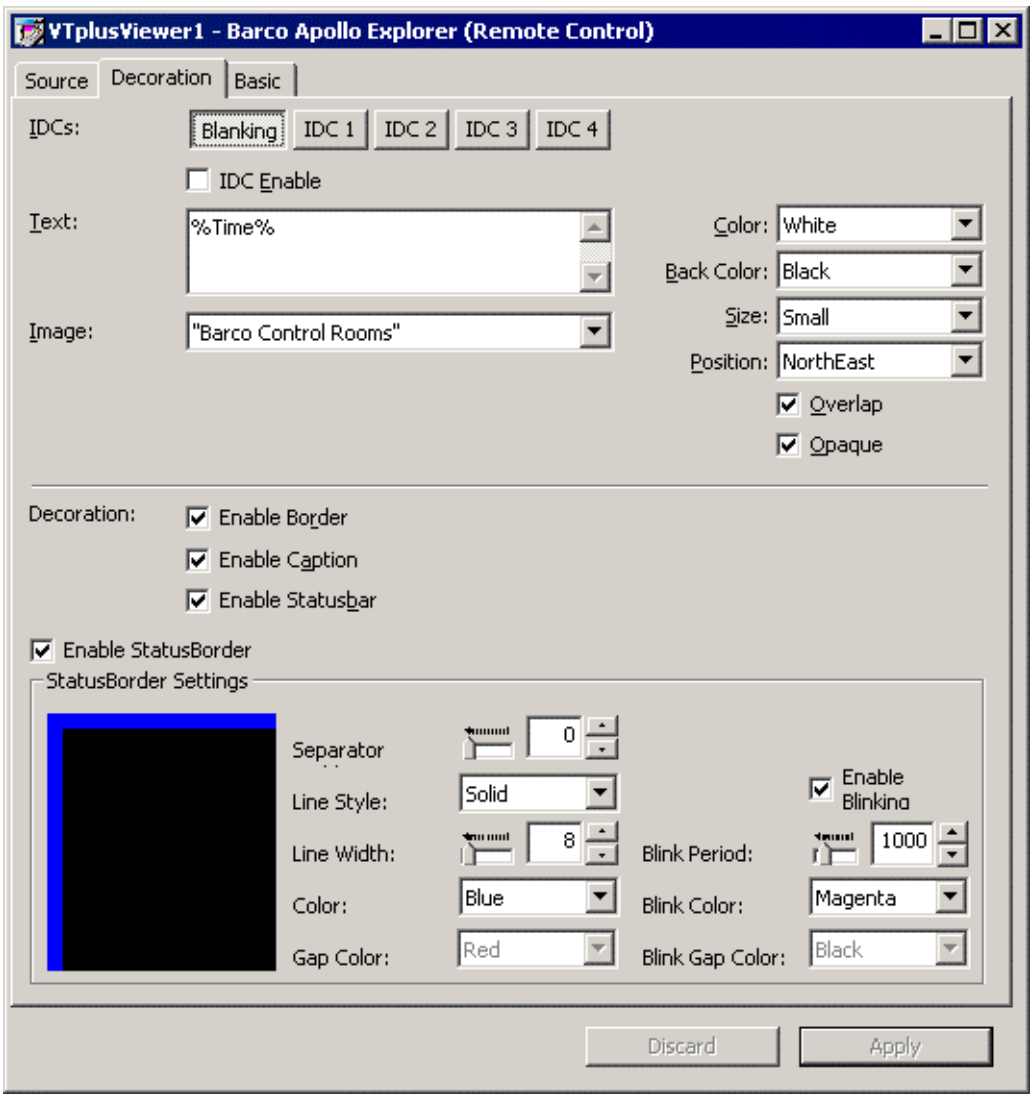
All entries into editable text fields (e.g., manual entries such as URLs) as well as the automatic name import (when selecting from list box) have to be confirmed with the Apply or cancelled with the Discard button.

6.8.8.2 Decoration

The **Decoration** tab is identical for all viewers. Here you can select whether to hide or show the title bar and/or status bar as well as the type and content of the information to be overlaid over the actual content of the viewer window.

If the entire window content is covered by an image, for example, the term used is **Blanking**.

If information is displayed covering only certain positions of the actual window, the term used is **In Display Caption** (IDC). You can define and activate up to 4 IDCs.



Click on **Blanking** (or **Idc1**, **Idc2**, **Idc3**, **Idc4**) to define the information to be depicted in the hide mode (information to be depicted as **IDC1**, **IDC2**, **IDC3**, **IDC4**).

Then select the **IdcEnable** option to overlay the selected information over the actual viewer window content according to settings.

Information can consist of any text, system parameters such as date and time (cf. Placeholders for In Display Caption Texts), and an image (logo). The available images are defined in the **ServerData\Globals.ini** file and identical for all viewers. Colors and font sizes are defined in this file as well.

You can select text color, text background color, size, and position for **In Display Caption**. Click on the **Opaque** option and the text is displayed on the selected color; otherwise, the background is transparent. In case the **Overlap** checkbox is ticked, the IDC is displayed within the insertion. Remove the tick to have it displayed outside the insertion! Please note that **Overlap** has no effect in case the IDC is centered!

The logo is always positioned in the corners of the windows followed by the text unless **Center** is selected. Selecting the **Center** position always places the logo to the left of the text.

Changes in the text field are not effective unless the Apply button is clicked. All remaining settings are applied without additional confirmation.

The available IDC positions are as follows:

- Northwest (upper left)
- Northeast (upper right)
- Southwest (lower left)
- Southeast (lower right)
- Center (centered)
- Center North (centered at the top)
- Center South (centered at the bottom)

The **Center North** and **Center South** positions overlay a **banner**, i.e., the IDC covers the entire width of the viewer window. If a logo is part of this IDC it is displayed in the upper or left or upper right corner.

An **In Display Caption** does not overlay the content of the viewer window until the IDC enable option has been activated. This option always refers to the currently clicked IDC button.

If several IDCs are activated simultaneously, they are aligned across the content of the viewer window in the order IDC1, IDC2, IDC3, IDC4. For example, if the position Northwest is selected for all IDCs, then IDC1 is depicted at the upper left, IDC2 below that, etc.

Title bar (**EnableCaption**) and status bar (**EnableStatusbar**) of the window can be hidden or shown. The title bar shows the **Ident** parameter of the viewer. The status bar lists the name or URL of the linked source as well as information about the downloading progress of the page.

In addition the **border** of the window can be enabled or disabled. If disabled, the caption is automatically disabled, too.

Without border, no caption can be displayed.

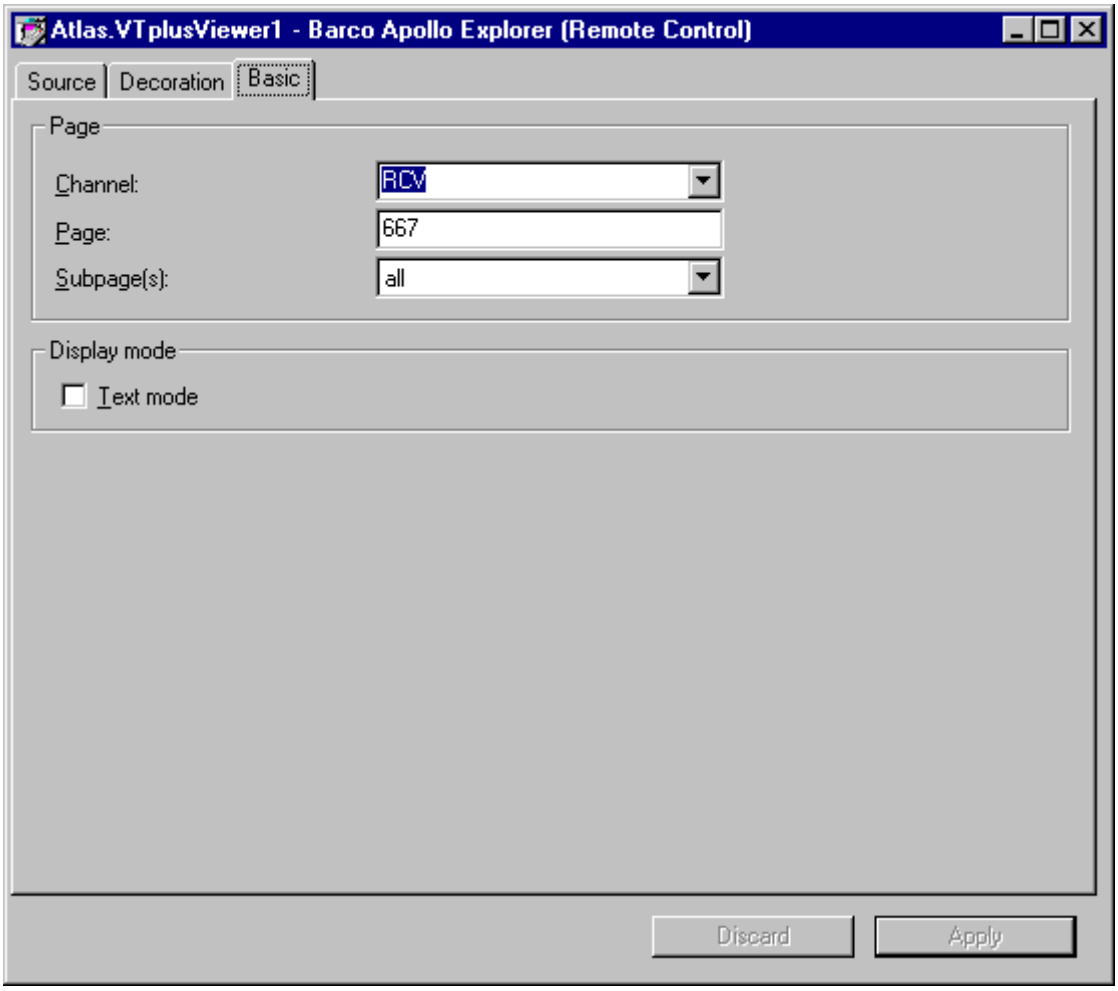
If the **StatusBorder** is enabled, the insertion is surrounded by a frame. The type of frame can be defined with regard to **Separator Width**, **Line Style**, **Line Width** and **Color**. In case Line Style is not solid, the gap color can also be defined.

This frame can be set static or blinking (**Enable Blinking**)

The frame is always surrounding the insertion. It is not surrounding the window!

All selections are immediately applied to the preview. To apply them also to the viewer window, click on **Apply**.

6.8.8.3 Basic



Select a **Channel** from the list box. The selection lists all broadcasters received by the broadband cable, satellite, or analog antenna. Enter the desired **page** as well as **subpages**.

The valid value range for videotext pages is from 100 to 899. Input of a nonexistent page or subpage does not result in an error message.

The VTplus Viewer waits for the corresponding signal until timeout.

Select **Text Mode** to view the videotext pages as pure ASCII text. Otherwise the page is displayed in graphics mode.

Use **Text Mode** if you want to highlight, copy (**Ctrl+C**), and paste the entire content or sections to other program such as Word, for example.

Available keycard shortcuts: **Ctrl +C** (copy), **Ctrl +V** (paste), and **Ctrl +A** (select all).

6.9 Placeholders for In Display Caption Texts

Placeholders can be specified for **In Display Caption** texts, which then display current system parameters during operation.

The following table lists placeholders that apply to all viewers:

Warning: Placeholder names are case sensitive!!

Placeholder	Description
%SourceRequested%	The CRB (control room bus) name of the source to be displayed. This name has been defined in the **ServerData\viewersources.ini** file. This placeholder normally corresponds with the %SourceConnected% placeholder
%SourceConnected%	CRB name of the source currently displayed. For predefined sources, this name has been defined in the **ServerData\viewersources.ini** file. For non-predefined sources, the name can freely be assigned to using this parameter
%SourceCaption%	Suitable name for the currently displayed source
%SourceTitle%	A title assigned to the source is depicted.
%Description%	Suitable name of the viewer instance
%Date%	Current date
%Time%	Current time
%Status%	Connection status or status of data stream after connection has been established. Status display description: Not connected (viewer waits for the control room bus); viewer is active but cannot be controlled in this state. Unknown source: The name of the source is unknown to the control room bus. Connecting ... : Waiting for the source object Unknown resource: (e.g., incorrect Visu input card, wrong channel with BigVideo, Quadvideo, RGB input cards, wrong workstation (Cottus), etc. Resource unavailable (the corresponding source is already controlled by another server within the Apollo network)

6.9.1 Specific FRG Viewer placeholders

Placeholder	Description
%Channel%	Active channel of input card
%Port%	Active port of input card
%SVSSourcName%	Name of source connected to Streaming Video Card
%Status% (specific values)	Freeze frame (video stopped) Playback Connecting with Manager (a connection with the Manager software is being established)

6.9.2 Specific Visu Viewer placeholders

Placeholder	Description
%IPUs%	Number of video input card (“1, 5, 10”)
%DeviceName%	Control room bus name for connected Visu device
%Status%	Freeze frame (video stopped) Playback Connecting with Manager (a connection with the Manager software is being established)

6.9.3 Specific Cottus Viewer placeholders

Placeholder	Description
%Hostname%	Name of connected workstation
%Status%	Status of connection

6.9.4 Specific VNC Viewer placeholders

Placeholder	Description
%Hostname%	Name of connected workstation
%Status%	Status of connection

6.9.5 Specific Pro Viewer placeholders

Placeholder	Description
%Hostname%	Name of connected workstation
%Status%	Status of connection

6.9.6 Specific Web Viewer placeholders

Placeholder	Description
%URL%	Name of Internet page
%Status%	Loading (page is loading) Ready (page has finished loading)

6.9.7 Specific MPEG Viewer placeholders

Platzhalter	Bedeutung
%URL%	Name of digital data stream
%Position%	Position in digital data stream
%Marker%	Name of current marker in the data stream (only if markers are supported)
%Status%	Pause: the Mpeg-data stream is paused (if resumed, it starts playing at the actual position) Stop: the Mpeg data stream is stopped (if resumed, it starts playing at the beginning)

6.9.8 Specific VTplus Viewer placeholders

Placeholder	Description
%Channel%	Name of videotext channel
%Page%	Number of videotext page
%SubPage%	Number of videotext subpage
%Status%	Loading (page is loading) Ready (page has finished loading) Connecting with Manager (a connection with the Manager software is being established)

6.10 The ServerData\Globals.ini File

Text colors, background colors, and font sizes, as well as other selections and definitions are defined in this file. There are no limits on the number of definitions.

The ServerData\Globals.ini file is located in the subfolder ServerData of the ApolloProject. Changes in files with the same names located in other directories are immediately overwritten by the ServerData\Globals.ini file located in the ServerData subdirectory.

Specify **text colors** in the section **IdcTextColorSelections** as RGB triple in hexadecimals. The same colors are also available as background colors.

Available **text sizes** are specified under the section header **IdcTextSizeSelections**; values are in pica points. The specified vertical size is also applied to the scaling factor for the logo.

Use section **IdcImageSelections** to define graphics or images to be available in the selection box for the blanking mode.

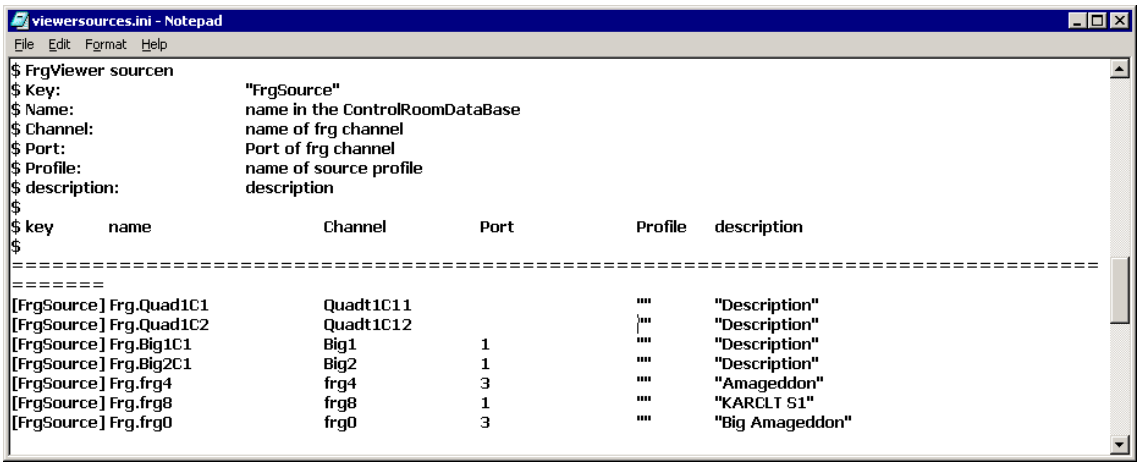
Use section **IdcImageSelections2** to define logo overlays.

For graphics, it is recommended to use .bmp files only! With .jpg files, the system may sometimes hang!

6.11 The ServerData\viewersources.ini File

The **ServerData\viewersources.ini** file is located in the subfolder **ServerData** of the ApolloProject. Use this file to define those sources for all viewers that can be activated with a mouse click.

6.11.1 FRG Viewer source specification


viewersources.ini - Notepad
File Edit Format Help
$ FrgViewer sourcen
$ Key: "FrgSource"
$ Name: name in the ControlRoomDataBase
$ Channel: name of frg channel
$ Port: Port of frg channel
$ Profile: name of source profile
$ description: description
$ key name Channel Port Profile description
[FrgSource] Frg.Quad1C1 Quadt1C11 "" "Description"
[FrgSource] Frg.Quad1C2 Quadt1C12 "" "Description"
[FrgSource] Frg.Big1C1 Big1 1 "" "Description"
[FrgSource] Frg.Big2C1 Big2 1 "" "Description"
[FrgSource] Frg.frg4 frg4 3 "" "Amageddon"
[FrgSource] Frg.frg8 frg8 1 "" "KARCLT S1"
[FrgSource] Frg.frg0 frg0 3 "" "Big Amageddon"

Name is the entry displayed in the selection list on the **Source** tab of the properties dialog box. Entries are listed in the form of a tree structure. Every dot in a name represents another branch.

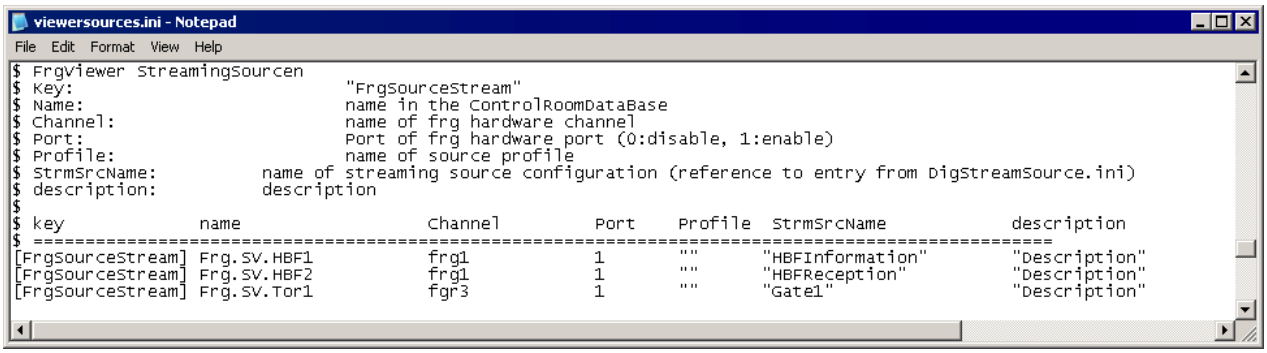
Channel is the name of the channel of the **QuadVideo Card**, **BigVideo Card**, or **RGB-Input Card** as defined in the switcher definition file; cf. Chapter 6.2.3 of the user's manual **TransForm A Workstation for Windows NT / Windows 2000**.

Port is the input source type of the analog input card (Composite1, Composite2, S-Video), cf. Advanced

Profiles lists the complete file name used to save the settings of certain source parameters (brightness, resolution, etc.).

Description is a freely selectable description for the depicted source. This description is then shown in the status bar of the viewer window as well and indicated as **SourceCaption** on the **Property dialog|Source.**

6.11.2 FRG Viewer streamingsource specification


viewersources.ini - Notepad
File Edit Format View Help
$ FrgViewer StreamingSourcen
$ Key: "FrgSourceStream"
$ Name: name in the ControlRoomDataBase
$ Channel: name of frg hardware channel
$ Port: Port of frg hardware port (0:disable, 1:enable)
$ Profile: name of source profile
$ StrmSrcName: name of streaming source configuration (reference to entry from DigStreamSource.ini)
$ description: description
$ key name Channel Port Profile StrmSrcName description
[FrgSourceStream] Frg.SV.HBF1 frg1 1 "" "HBFInformation" "Description"
[FrgSourceStream] Frg.SV.HBF2 frg1 1 "" "HBFReception" "Description"
[FrgSourceStream] Frg.SV.Tor1 fgr3 1 "" "Gate1" "Description"

Name is the entry displayed in the selection list on the **Source** tab of the properties dialog box. Entries are listed in the form of a tree structure. Every dot in a name represents another branch.

Channel is the name of the channel of the **Streaming Video Card** as defined in the SwitcherLanguageCompiler.

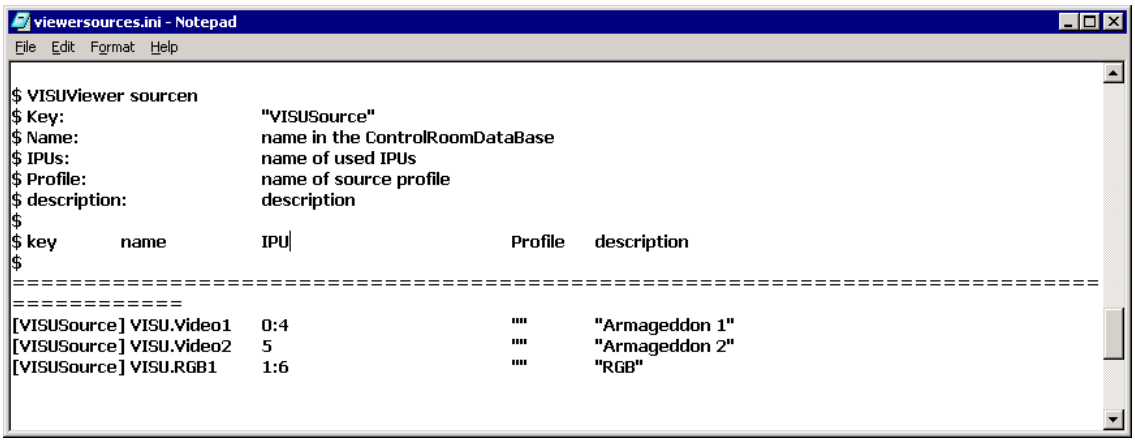
Port is the port of the card

Profiles lists the complete file name used to save the settings of certain source parameters (brightness, resolution, etc.).

StrmSrcName is a freely selectable Name of the streaming source. The parameters of the streaming source are specified in the DigitalStreamSource.ini-file and are allocated by means of this name.

Description is a freely selectable description for the depicted source. This description is then shown in the status bar of the viewer window as well and indicated as **SourceCaption** on the **Property dialog|Source.**

6.11.3 Visu Viewer source specification


viewersources.ini - Notepad
File Edit Format Help
$ VISUViewer sourcen
$ Key: "VISUSource"
$ Name: name in the ControlRoomDataBase
$ IPUs: name of used IPUs
$ Profile: name of source profile
$ description: description
$
$ key name IPU Profile description
$
[VISUSource] VISU.Video1 0:4 "" "Armageddon 1"
[VISUSource] VISU.Video2 5 "" "Armageddon 2"
[VISUSource] VISU.RGB1 1:6 "" "RGB"

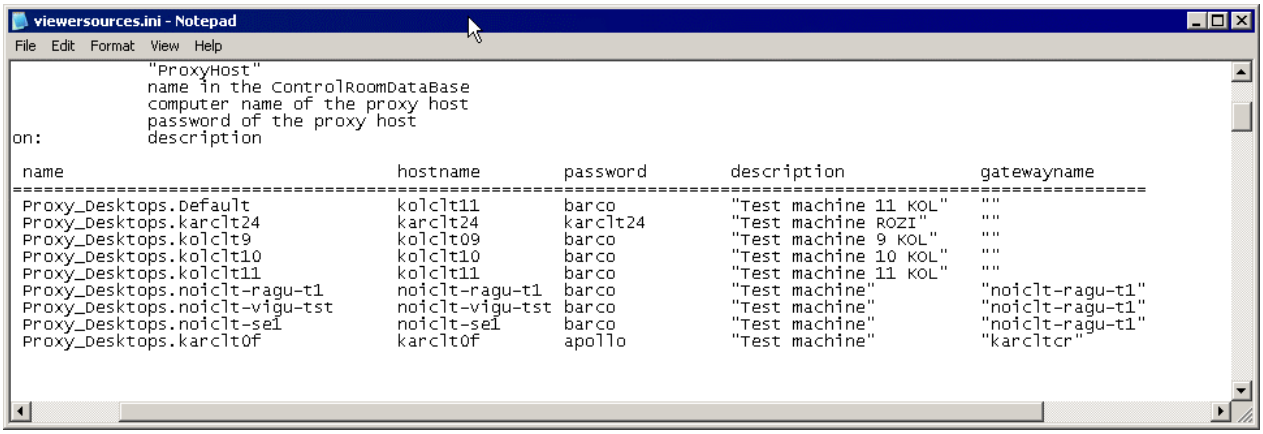
Name is the entry displayed in the selection list on the **Source** tab of the properties dialog box. Entries are listed in the form of a tree structure. Every dot in a name represents another branch.

IPU indicates the number of the input card(s). Numbering from top down.

Profiles lists the complete file name used to save the settings of certain source parameters (brightness, resolution, etc.).

Description is a freely selectable description for the depicted source. This description is then shown in the status bar of the viewer window as well and indicated as **SourceCaption** on the **Property dialog|Source.**

6.11.4 Cottus Viewer source specification


viewersources.ini - Notepad
File Edit Format View Help
"ProxyHost"
name in the ControlRoomDataBase
computer name of the proxy host
password of the proxy host
on: description
name hostname password description gatewayname
Proxy_Desktops.Default kolclt11 barco "Test machine 11 KOL" ""
Proxy_Desktops.karclt24 karclt24 karclt24 "Test machine ROZI" ""
Proxy_Desktops.kolclt9 kolclt09 barco "Test machine 9 KOL" ""
Proxy_Desktops.kolclt10 kolclt10 barco "Test machine 10 KOL" ""
Proxy_Desktops.kolclt11 kolclt11 barco "Test machine 11 KOL" ""
Proxy_Desktops.noiclt-ragu-t1 noiclt-ragu-t1 barco "Test machine" "noiclt-ragu-t1"
Proxy_Desktops.noiclt-vigu-tst noiclt-vigu-tst barco "Test machine" "noiclt-ragu-t1"
Proxy_Desktops.noiclt-se1 noiclt-se1 barco "Test machine" "noiclt-ragu-t1"
Proxy_Desktops.karclt0f karclt0f apollo "Test machine" "karcltcr"

Name is the entry displayed in the selection list on the **Source** tab of the properties dialog box. Entries are listed in the form of a tree structure. Every dot in a name represents another branch.

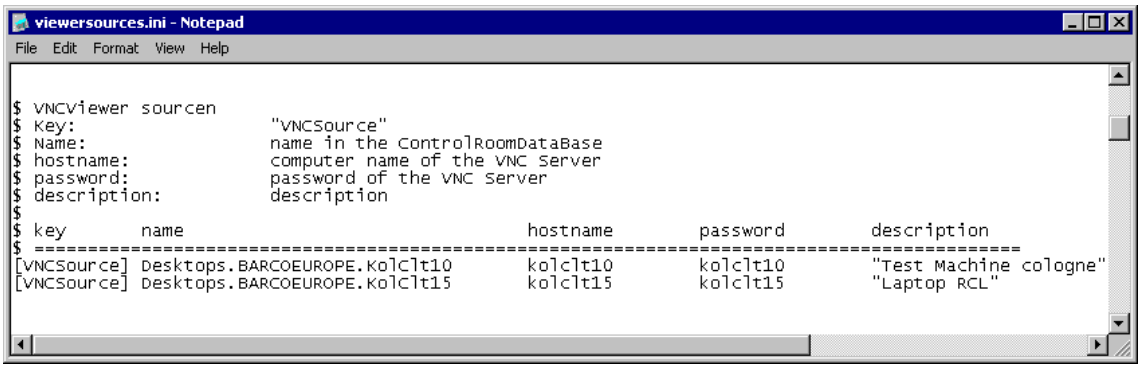
Hostname is the server name within the network. Enter here the IP address of the server if it has no assigned name. Proxy Host by Funk Software Inc. and the host license have to be installed on this server!

Password is the password defined during the installation of Proxy Host on the host server and which enables or disables the display of the screen of a workstation using the viewer. This freely defined password is NOT the password of the computer user within the network.

Description is a freely selectable description for the connected server. This description is then shown in the status bar of the viewer window as well and indicated as **SourceCaption** on the **Property dialog|Source.**

Gatewayname is the name of the gateway server registered for the respective workstation. If the gateway is not specified in the viewersources.ini –file, it is not available, and recording or playing back of host sessions is not supported.

6.11.5 VNC Viewer source specification


viewersources.ini - Notepad
File Edit Format View Help
$ VNCViewer sourcen
$ Key: "VNCSource"
$ Name: name in the ControlRoomDataBase
$ hostname: computer name of the VNC Server
$ password: password of the VNC Server
$ description: description
$
$ key name hostname password description
[VNCSource] Desktops.BARCOEUROPE.KolClt10 kolclt10 kolclt10 "Test Machine cologne"
[VNCSource] Desktops.BARCOEUROPE.KolClt15 kolclt15 kolclt15 "Laptop RCL"

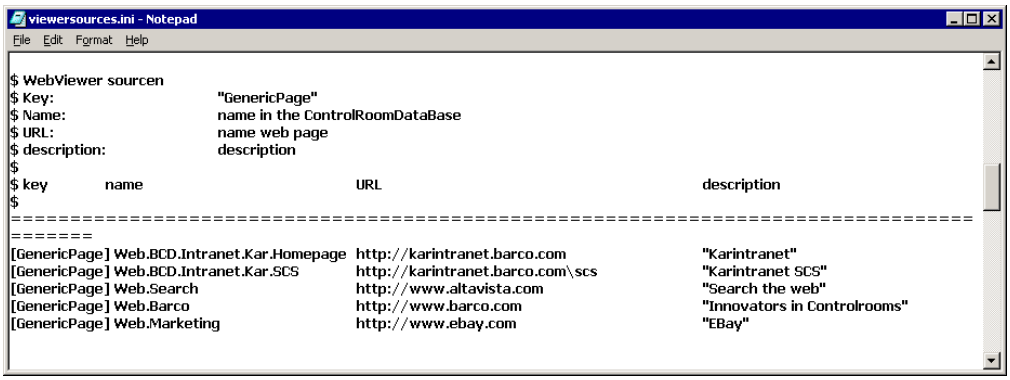
Name is the entry displayed in the selection list on the **Source** tab of the properties dialog box. Entries are listed in the form of a tree structure. Every dot in a name represents another branch.

Hostname is the server name within the network. Enter here the IP address of the server if it has no assigned name. Proxy Host by Funk Software Inc. and the host license have to be installed on this server!

Password is the password defined during the installation of Proxy Host on the host server and which enables or disables the display of the screen of a workstation using the viewer. This freely defined password is NOT the password of the computer user within the network.

Description is a freely selectable description for the connected server. This description is then shown in the status bar of the viewer window as well and indicated as **SourceCaption** on the **Property dialog|Source.**

6.11.6 Web Viewer source specification

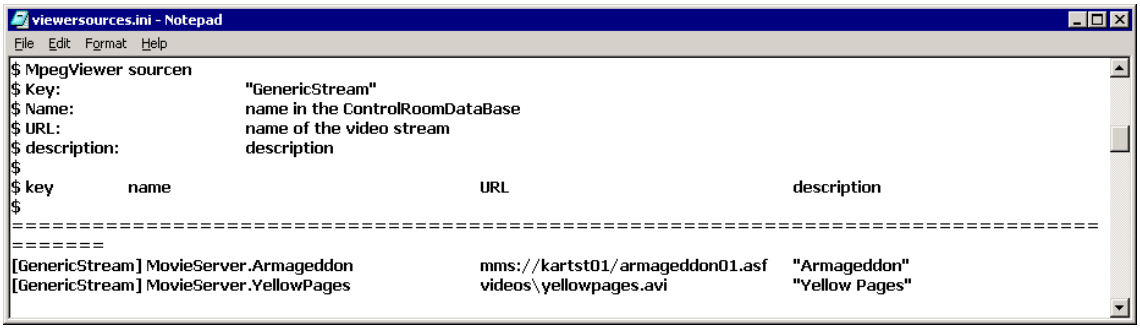

viewersources.ini - Notepad
File Edit Format Help
$ WebViewer sourcen
$ Key: "GenericPage"
$ Name: name in the ControlRoomDataBase
$ URL: name web page
$ description: description
$
$ key name URL description
[GenericPage] Web.BCD.Intranet.Kar.Homepage http://karintranet.barco.com "Karintranet"
[GenericPage] Web.BCD.Intranet.Kar.SCS http://karintranet.barco.com\scs "Karintranet SCS"
[GenericPage] Web.Search http://www.altavista.com "Search the web"
[GenericPage] Web.Barco http://www.barco.com "Innovators in Controlrooms"
[GenericPage] Web.Marketing http://www.ebay.com "EBay"

Name is the entry displayed in the selection list on the **Source** tab of the properties dialog box. Entries are listed in the form of a tree structure. Every dot in a name represents another branch.

URL is the address the Web Browser is to open when selecting the associated name.

Description is a freely selectable description for the depicted source. This description is then shown in the status bar of the viewer window as well and indicated as **SourceCaption** on the **Property dialog|Source.**

6.11.7 MPEG Viewer source specification

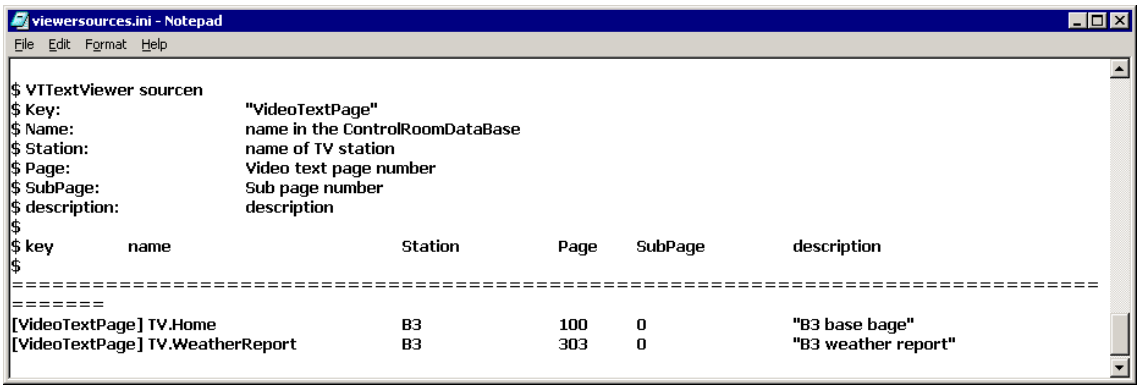


Name is the entry displayed in the selection list on the **Source** tab of the properties dialog box. Entries are listed in the form of a tree structure. Every dot in a name represents another branch.

URL is the path of the video source.

Description is a freely selectable description for the depicted source. This description is then shown in the status bar of the viewer window as well and indicated as **SourceCaption** on the **Property dialog|Source.**

6.11.8 VTplus Viewer source specification


viewersources.ini - Notepad
File Edit Format Help
$ VTTextViewer sourcen
$ Key: "VideoTextPage"
$ Name: name in the ControlRoomDataBase
$ Station: name of TV station
$ Page: Video text page number
$ SubPage: Sub page number
$ description: description
$
$ key name Station Page SubPage description
$
[VideoTextPage] TV.Home B3 100 0 "B3 base bage"
[VideoTextPage] TV.WeatherReport B3 303 0 "B3 weather report"

Name is the entry displayed in the selection list on the **Source** tab of the properties dialog box. Entries are listed in the form of a tree structure. Every dot in a name represents another branch.

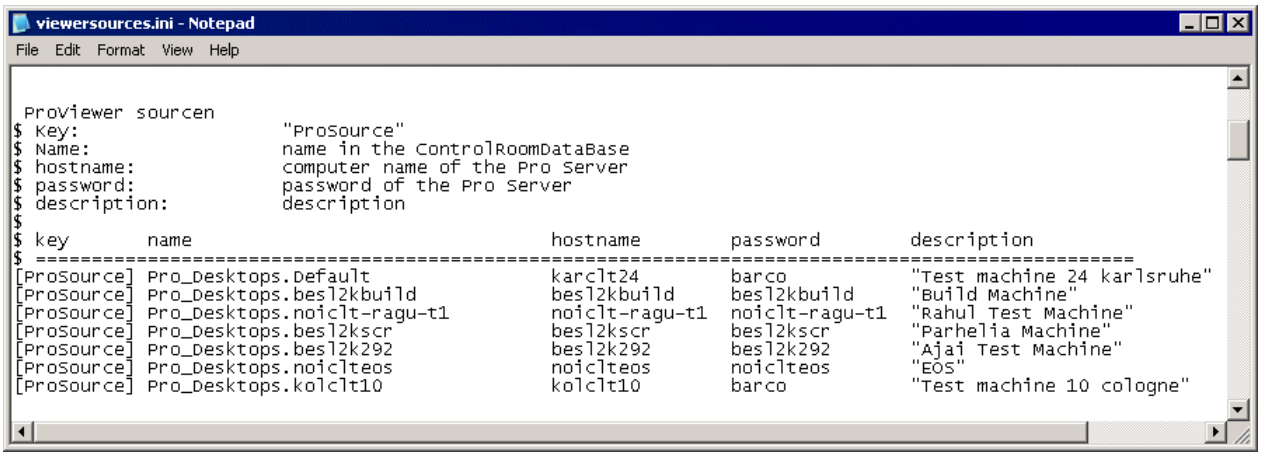
Station is the name of the broadcast station.

Enter the page number of the video text under **Page** and the subpage number under **Subpage**.

Description is a freely selectable description for the depicted source. This description is then shown in the status bar of the viewer window as well and indicated as **SourceCaption** on the **Property dialog|Source.**

6.11.9 ProViewer source specification

Those specifications do not only apply for the ProViewer, it is the Remote Pointer, too, which uses these specifications.


viewersources.ini - Notepad
File Edit Format View Help
ProViewer sourcen
$ Key: "ProSource"
$ Name: name in the ControlRoomDataBase
$ hostname: computer name of the Pro Server
$ password: password of the Pro Server
$ description: description
$
$ key name hostname password description
[ProSource] Pro_Desktops.Default karclt24 barco "Test machine 24 karlsruhe"
[ProSource] Pro_Desktops.besl2kbuild besl2kbuild besl2kbuild "Build Machine"
[ProSource] Pro_Desktops.noiclt-ragu-t1 noiclt-ragu-t1 noiclt-ragu-t1 "Rahul Test Machine"
[ProSource] Pro_Desktops.besl2kscr besl2kscr besl2kscr "Parhelia Machine"
[ProSource] Pro_Desktops.besl2k292 besl2k292 besl2k292 "Ajai Test Machine"
[ProSource] Pro_Desktops.noiclteos noiclteos noiclteos "EOS"
[ProSource] Pro_Desktops.kolclt10 kolclt10 barco "Test machine 10 cologne"

Name is the entry displayed in the selection list on the **Source** tab of the properties dialog box. Entries are listed in the form of a tree structure. Every dot in a name represents another branch.

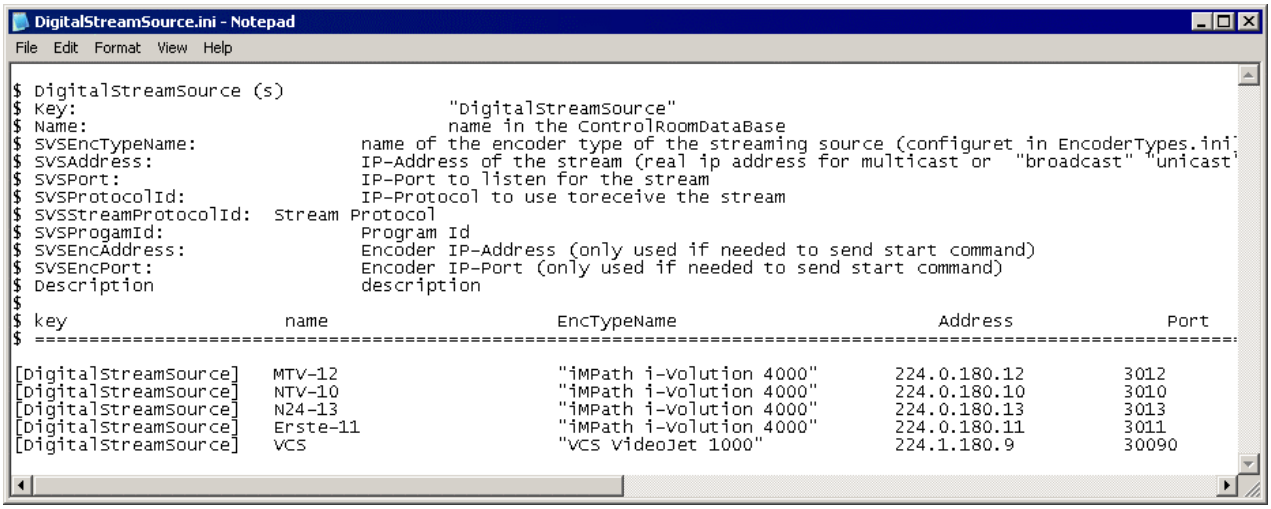
Hostname is the server name within the network.

Password is the password defined during the installation of ProServer on the host server and which enables or disables the display of the screen of a workstation using the viewer. This freely defined password is NOT the password of the computer user within the network.

Description is a freely selectable description for the connected server. This description is then shown in the status bar of the viewer window as well and indicated as **SourceCaption** on the **Property dialog|Source.**

6.12 The ServerData\DigitalStreamSource.ini-file

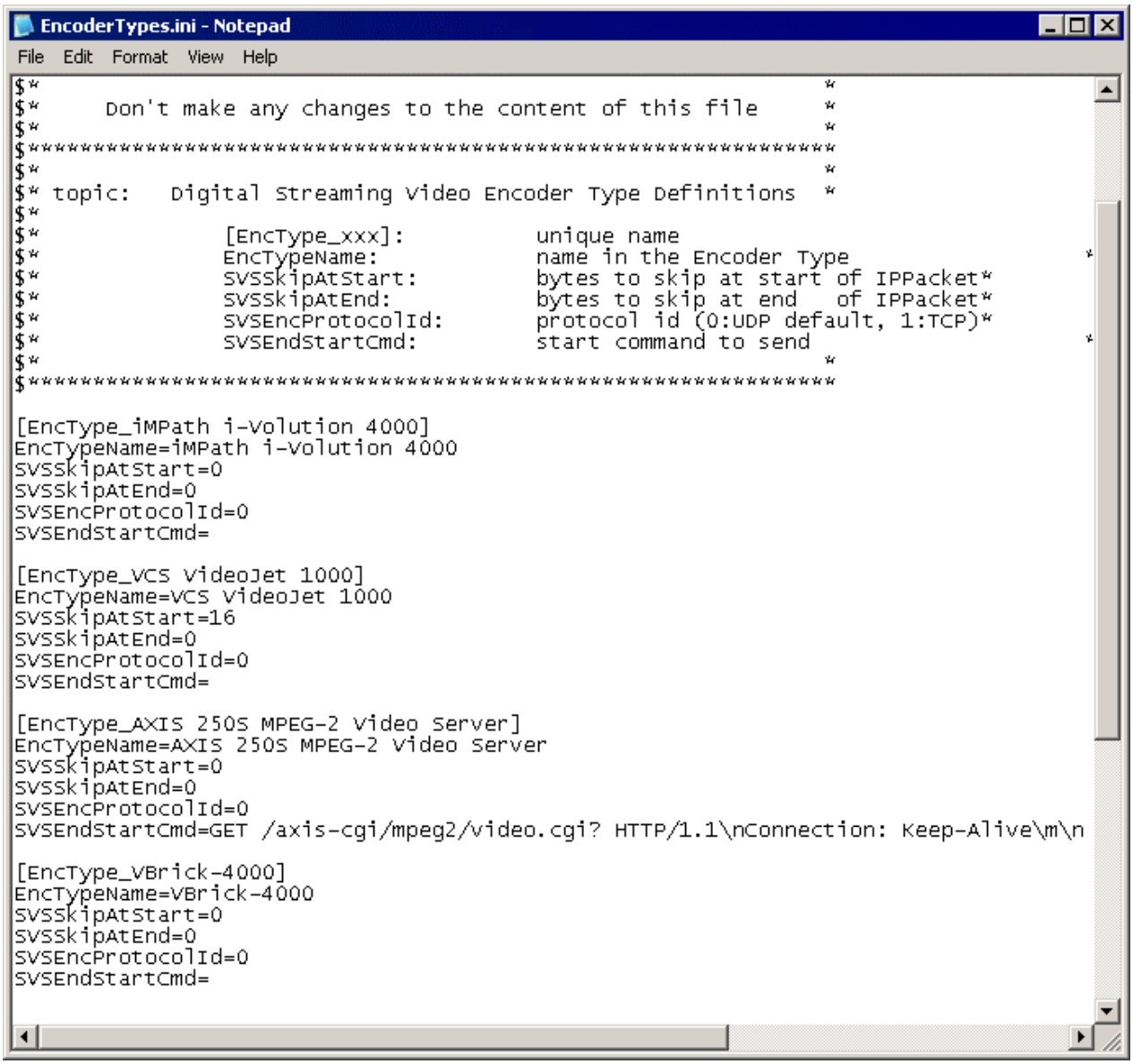
Digital video sources have to be defined in a dedicated.ini-file since a lot of parameters are to be specified.


DigitalStreamSource.ini - Notepad
File Edit Format View Help
$ DigitalStreamSource (s)
$ Key: "DigitalStreamSource"
$ Name: name in the ControlRoomDataBase
$ SVSEncTypeName: name of the encoder type of the streaming source (configuret in EncoderTypes.ini
$ SVSAddress: IP-Address of the stream (real ip address for multicast or "broadcast" "unicast"
$ SVSPort: IP-Port to listen for the stream
$ SVSProtocolId: IP-Protocol to use toreceive the stream
$ SVSStreamProtocolId: Stream Protocol
$ SVSProgamId: Program Id
$ SVSEncAddress: Encoder IP-Address (only used if needed to send start command)
$ SVSEncPort: Encoder IP-Port (only used if needed to send start command)
$ Description description
$ key name EncTypeName Address Port
[DigitalStreamSource] MTV-12 "iMPath i-Volution 4000" 224.0.180.12 3012
[DigitalStreamSource] NTV-10 "iMPath i-Volution 4000" 224.0.180.10 3010
[DigitalStreamSource] N24-13 "iMPath i-Volution 4000" 224.0.180.13 3013
[DigitalStreamSource] Erste-11 "iMPath i-Volution 4000" 224.0.180.11 3011
[DigitalStreamSource] VCS "VCS VideoJet 1000" 224.1.180.9 30090

Paramter	**description**
Name:	name in the ControlRoomDataBase
EncTypeName:	name of the encoder type of the streaming source (configured in EncoderTypes.ini)
Address:	IP-Address of the stream (real IP address for “multicast” or "broadcast" "unicast")
Port:	IP-Port to listen for the stream
ProtocolId:	IP-Protocol to use to receive the stream
StreamProtocolId:	Stream Protocol
ProgamId:	Program Id
EncAddress:	Encoder IP-Address (only used if needed to send start command)
EncPort:	Encoder IP-Port (only used if needed to send start command)
Description	description

6.13 The ServerData\EncoderType.ini-file

This file lists some of the well known encoders and their default parameters thus providing a convenient way to specify the encoder of the video stream.



[EncType_xxx]:	unique name
EncTypeName:	name in the Encoder Type
SVSSkipAtStart:	bytes to skip at start of IPPacket*
SVSSkipAtEnd:	bytes to skip at end of IPPacket*
SVSEncProtocolId:	protocol id (0:UDP default, 1:TCP)*
SVSEndStartCmd:	start command to send

6.14 Global Viewer Parameters

The following table lists the parameters that apply to all viewers.

A parameter can be activated or deactivated (values 1 or 0) or have a value specified with the list position of the corresponding entry in the **ServerData\Globals.ini** file.

Exception: The position of the **In Display Caption** is not defined in the **ServerData\Globals.ini** file. The following assignments apply to the positions:

1	Northeast
2	Northwest
3	Southeast
4	Southwest
5	Center
6	North Center
7	South Center

The viewers can be controlled by the viewer command interface, cf. Viewer command Interface.

Parameter	Values	Description
?		Writes the help command line parameter into the log file
splash	[1|2500]	Disables (1) or enables splash screen when starting viewer (2500: time in ms the splash screem is displayed)
Ident	[]	Unambiguous name of the viewer instance
IdcEnabled	[0|1]	Deactivates/activates blanking
IdcPosition	[1..7]	Position of the displayed text in blanking mode; the value is converted based on the assignment listed above.
IdcText	[]	Text in blanking mode
IdcTextColor	[1..]	Text color; value matches the list position in definition file ServerData\Globals.ini.
IdcBackColor	[1..]	Background color; value matches the list position in definition file ServerData\Globals.ini.
IdcOpaque	[0|1]	Activates or deactivates background color. Zero: the background is transparent. One: the color defined as IdcBackColor is used as the background color.
IdcOverlap	[0|1]	0: IDC is placed outside the insertion, 1: IDC is placed inside the insertion
IdcTextSize	[1..]	Text size; value matches the list position in definition file ServerData\Globals.ini.
IdcImage	[1..]	Bitmap used as overlay over the viewer window when blanking

Parameter	Values	Description
		mode is selected. The value matches the list position in the definition file ServerData\Globals.ini [IdcImageSelection].
IdcBoSLEnabled	[0|1]	1: at signal loss, the blanking image is displayed; 0: blue screen at signal loss
Idc[1..4]Enabled	[0|1]	Activate (1) or deactivate (0) In Display Caption [1...4]
Idc[1..4]Position	[1..7]	Position of the displayed text for the Idc[1...4]; the value is converted based on the assignment listed above.
Idc[1..4]Text	[]	Text of the In Display Caption [1...4]
Idc[1..4]TextColor	[1..]	Text color, value matches the list position in definition file ServerData\Globals.ini
Idc[1..4]BackColor	[1..]	Background color; value matches the list position in definition file ServerData\Globals.ini.
Idc[1..4]Opaque	[0|1]	Activates or deactivates background color. Zero: the background is transparent. One: the color defined as IdcBackColor is used as the background color.
Idc[1..4]Overlap	[0|1]	0: IDC is placed outside the insertion, 1: IDC is placed inside the insertion
Idc[1..4]TextSize	[1..]	Text size; value matches the list position in definition file ServerData\Globals.ini.
Idc[1..4]Image	[1..]	Logo used overlay over the actual content of the viewer window. The value matches the list position in the definition file ServerData\Globals.ini [IdcImageSelection2].
ReconnectionTimeInterval	[1..]	number to customize the time interval in seconds used before trying to reastablish a lost connection. Default is 30 seconds.
FontName	[font]	Set the main font
FontSize	[size]	Set size of the main font
LabelFontName	[font]	Set the font of the label
LabelFontSize	[size]	Set the size of the font for the labels
CaptionVisible	[0|1]	Activates (1) or deactivates (0) title bar
StatusBarVisible	[0|1]	Activates (1) or deactivates (0) status bar
BorderVisible	[0|1]	Activates (1) or deactivates (0) border
Description	[]	Suitable name for the viewer instance
SourceCaption	[]	Suitable name for the viewer source
SourceTitle	[]	Title of the selected source
SourceRequested	[]	Name of a source as defined in the ServerData\viewersources.ini file. The viewer will activate the settings selected for this source and display the source.
SourceConnected	[]	Freely definable name of the currently applicable source. The viewer will activate the preceding settings and display the source.
End		Ends the viewer application

Parameter	Values	Description
StartMinimized	[0|1]	Deactivates/activates minimized launch. The viewer window is minimized when first launched until the Desktop server has positioned the window according to the active layout.
PropertyPagePermission	[0|1]	Permission to open the properties dialog box of the viewer (0: not permitted, 1 permitted)
PropertyPage		The properties dialog box is displayed immediately
PropertyPageAccelerator	[CTRL+SHIFT+ALT+<char>	User defined shortcut to open the properties dialog box (default: CTRL+ALT+ENTER)
StatusBorderEnabled	[0|1],	disable / enable the Out-Display-Frame
StatusBorderEnableBlink	[0|1],	disable / enable blinking, <0: disable (default)
StatusBorderBlinkPeriod	[200..],	the blink period in milliseconds, (1000 default)
StatusBorderLineBlinkColor	[1..],	blink color of the frame (reference ID to Globals.ini file section)
StatusBorderLineBlinkGapColor	[1..],	blink color of line gaps, only visible if line style <> solid. (reference ID to Globals.ini file section)
StatusBorderLineColor	[1..],	normal color of the frame (reference ID to Globals.ini file section)
StatusBorderLineGapColor	[1..],	normal color of line gaps, only visible if line style <> solid. (reference ID to Globals.ini file section)
StatusBorderLineStyle	[1..],	line style, (reference ID into Globals.Ini file)
StatusBorderLineWidth	[1..],	line width of the frame in pixels
StatusBorderSeparatorWidth	[0..],	separator width of the frame in pixels

6.14.1 FRG Viewer parameters

Parameter	Values	Description
AutoDetect	[0|1]	Activates (1) or deactivates (0) the AutoDetect mode of the video standard Disables/enables auto detection of video standard
AutoPhasePosDetect	[0|1]	enable/ disable (default) auto detection of signal phase and position
Brightness	[1..100]	Brightness (in percent)
Channel	[]	Name of the channel of the video/RGB input card
Contrast	[1..100]	Contrast (in percent)
DeInterlaceMode	[1|2|3|4|5]	Selects the respective Mode (1:Mode1, 2:Mode2, 3:Mode3, 4:Mode4, 5:Mode5)
Framerate	[0|1]	0: 25/30 fps; 1: 50/60 fps
Frameratereduction	[1..100]	specify some frame rate reduction factor, zero means no reduc-

Parameter	Values	Description
		tion , 100 means max reduction
Framerateredu ction-mode	[0|1|2]	specifies if to use the default frame reate reduction (mode:0) which is also the default setting, or if to use no reduction (mode: 1), or if to specify a variable frame rate reduction (mode:2)
Hue	[1..100]	Hue (in percent)
LastFrameOnSignalLoss	[0|1],	disable, enable signal loss detection (default is 0, disabled) This option only makes sense for streaming video card types. If disabled the insertion will get blue during signal loss. If enabled the insertion will still hold the last frame during signal loss.
Port	[1..9]	Port of the channel on the input card
RemotingSetting-sEnabled	[0|1]	disable | enable remoting capabilities (default is 0: disabled)
RemotingSettingsLogi-calHostname	[]	string specifying a configured Pro- or VNC- source out of the viewer sources
rgbBlue	[0..100]	Blue fraction of the RGB signal (in percent)
rgbGreen	[0..100]	Green fraction of the RGB signal (in percent)
RGBPresetName	[]	name of the preset to load
RgbProfileName	[]	Name of the profile for the RGB source
rgbRed	[0..100]	Red fraction of the RGB signal (in percent)
rgbReduction	[0..100]	Factor of the dyn. reduction rate
Saturation	[1..100]	Saturation (in percent)
SclPixelFormat	[],	name of the pixel format to choose manually (RGB 8:8:8, RGB 5:6:5, YUV 4:2:2), default is automatic mode
SclPixelFormatAuto-matic	[0|1],	disable / enable automatic pixel format mode (default is 1, automatic mode)
SclSharpness	[0..15],	number to change the scale sharpness (0 is default)
Sharpness	[1..100]	Focus/sharpness (in percent)
SrcProfileName	[]	Name of the profile for the video source
SVBAddress	[]	string to change the IP address of a streaming video board
SVBCodecName	[]	string to change the codec for streaming video boards (mpeg2, mpeg4, visiowave, ...)
SVBGateway	[]	string to change the gateway used by a streaming video board
SVBNetmask	[]	string to change the netmask used by a streaming video board
SVSAddress	[]	'unicast', 'broadcast', real IP-Address if multicast
SVSEncAddress	[]	network: IP-Address of the encoder
SVSEncPort	[]	network: Port of the encoder listening for commands
SVSEncProtocolId	[0|1]	encoder type: IP-Protocol index 0 (default): udp, 1: tcp*
SVSEncStartCmd	[]	encoder type: optional command to send to encoder to start streaming ("" is default)

Parameter	Values	Description
SVSEncTypeName	[]	name of logical encoder type defined in EncoderTypes.ini, covers the following settings
SVSPid	[0,...]	program id (0 special meaning: auto)"
SVSPort	[]	network: port number to listen for stream
SVSProtocolId	[0|1]	network: IP-Protocol index 0: udp (default), 1: tcp
SVSSkipAtEnd	[0,...]	encoder type: number of bytes to skip at end of each IP-Packet (0 is default)
SVSSkipAtStart	[0,...]	encoder type: number of bytes to skip at start of each IP-Packet (0 is default)
SVSSrcName	[]	name of logical streaming source defined in DigitalStream-Sources.ini
SVSStreamProtocolId	[0,..3]	stream protocol id 0:auto (default), 1: elementary, 2: program, 3: transport
Transparency	[0..255]	number to change the alpha (transparency) of the insertion (0 is default)
VideoNorm	[]	Name of the video standard the video is forced to use if Auto-Detect is disabled
VideoSourceRatioToForceTo	[0|1|2]	Tithe parameter determines how to interpret the source extend: 0: use the extend of the sampled source (default, the compatible mode compared to versions < 1.8) 1: force to ratio 4:3 by adjusting the height 2: force to ratio 16:9 by adjusting the height
WndFreeze	[0|1]	Freeze frame 0: Continues playback 1: Frame is stopped
WndScaleMode	[1..3]	Scaling types of the selected section: 1: Native size/resolution 2: Preserve aspect ratio 3: Fit window
WndViewPort	[Left, Top, Right, Bottom]	Selected section (position indicated in boundary values left, right, top, bottom); each with a possible range of 0 to 100.
WndViewPortRatio	[1..6]	Predefined aspect ratios for the selected section: 1: Any 2: 4:3 3: 41:47 4: 16:9 5: 41:18 6: 41:17

6.14.2 Visu Viewer parameters

Parameter	Values	Description
Brightness	[1..100]	Brightness (in percent)
Contrast	[1..100]	Contrast (in percent)
DeviceName	[]	Name of the Visu device in the control room database
Hue	[1..100]	Hue (in percent; only with NTSC)
hwFrameRateDivider	[0..3]	Frame refresh factor 0: 1 1: 1/2 2: 1/4 3: 1/8
hwFrameRateReductionMax	[0..4]	Reserved for future use
IPUs	[]	Number(s) of the Visu input card(s); separator is ":"
RGBBlueCoarseGain	[0..100]	number to calibrateRGB insertion blue coarse gain
RGBBlueCoarseGainOffset	[0..100]	number to calibrateRGB insertion blue coarse offset gain
RGBBlueCutOff	[0..100]	number to calibrateRGB insertion blue cut off
RGBBlueCutOffOffset	[0..100]	number to calibrateRGB insertion blue cut off offset
RGBBlueFineGain	[0..100]	number to calibrateRGB insertion blue fine gain
RGBBlueFineGainOffset	[0..100]	number to calibrateRGB insertion blue fine offset gain
RGBGreenCoarseGain	[0..100]	number to calibrateRGB insertion green coarse gain
RGBGreenCoarseGainOffset	[0..100]	number to calibrateRGB insertion green coarse offset gain
RGBGreenCutOff	[0..100]	number to calibrateRGB insertion green cut off
RGBGreenCutOffOffset	[0..100]	number to calibrateRGB insertion green cut off offset
RGBGreenFineGain	[0..100]	number to calibrateRGB insertion green fine gain
RGBGreenFineGainOffset	[0..100]	number to calibrateRGB insertion green fine offset gain
rgbHorzPhase	[1..511]	Horizontal phase
rgbHorzRes	[1..1280]	Horizontal resolution
rgbHorzTotalPixels	[1..2047]	Sum of pixels (visible and hidden)
rgbInputType	[0|1] [0...2]	Disables/enables RGB input

Parameter	Values	Description
RgbProfileName	[]	Name of the profile for the RGB source
RGBRedCoarseGain	[0..100]	number to calibrateRGB insertion; red coarse gain
RGBRedCoarseGainOffset	[0..100]	number to calibrateRGB insertion; red coarse offset gain
RGBRedCutOff	[0..100]	number to calibrateRGB insertion; red cut off
RGBRedCutOffOffset	[0..100]	number to calibrateRGB insertion; red cut off offset
RGBRedFineGain	[0..100]	number to calibrateRGB insertion; red fine gain
RGBRedFineGainOffset	[0..100]	number to calibrateRGB insertion; red fine offset gain
rgbSamplingPhase	[1..31]	Sampling phase
rgbVertPhase	[1..511]	Vertical phase
rgbVertRes	[1..1024]	Vertical resolution
Saturation	[1..100]	Saturation (in percent)
Sharpness	[1..100]	Focus/sharpness (in percent)
SrcProfileName	[]	Name of the profile for the video source
VideoFormat	[1..9]	Video standard 1: Auto PAL 2: Auto NTSC 3: Force PAL 4: Force PALN 5: Force PAL Combination 6: Force PALM 7: Force NTSCM 8: Force NTSC Japan 9: Force SECAM:
VideoInputType	[1..2]	Video type 1: Composite (BNC); 2: S-Video
WndForceHorzVertScaling	[1..5]	Scaling factors for the selected section: 1: Native size 2: Half of native size (1/2) 4: Third of native size (1/3) 4: Quarter of native size (1/4) 5: Fifth of native size (1/5)
WndFreeze	[0|1]	Freeze frame 0: Continues playback; 1: Freeze frame
WndScaleMode	[1..3]	Scaling mode of the selected section: Native size/resolution 2: Preserve aspect ratio 3: Fit window
WndViewport	[Left, Top, Right, Bottom]	Selected section (position indicated in boundary values left, right, top, bottom); each with a possible range of 0 to 100.
WndViewPortRatio	[1..6]	Predefined aspect ratios for the selected section: 1: Any;2: 4:3; 3: 41:27; 4: 16:9; 5: 41:18; 6: 41:17

6.14.3 Cottus Viewer parameters

Parameter	Values	Description
EnableRemoteHost	[0|1]	Permits (1) or deactivates (0) local mouse and keycard activities on the linked workstation
EnableScaleMode	[0|1]	The displayed screen content can be scaled in the viewer window (1) or is displayed only as 1:1 (0)
EnableScrollBars	[0|1],	disable / enable mouse and keyboard redirection to the scraped host
GatewayName	[],	name of the gateway
Hostname	[]	Name of the workstation in network with the screen content to be depicted on the display wall
Password	[]	Password of the workstation to be displayed
PlayerAction	[0..3],	number to set player action: 0 stop, 1 play, 2 record, 3 pause
ScaleZoomFactor	[0..2000],	number to set scale zoom factor X/Y in percent, 100 is default
ScalingViewPortPosPercent	[],	string to set viewport coordinates in percent, "0;0;100;100" is default, will activate unit type pixel too
ScalingViewPortPosPixel	[],	string to set viewport coordinates in pixel, will activate unit type percentage too
ScalingViewPortPosUnitType	[0|1],	switch between pixel and percentage viewport coordinate mode, default is percentage
SessionLength	[1....]	length of recorded session in minutes
SessionName	[],	name of the recorded (or to be recorded) session

6.14.4 VNC Viewer parameters

Parameter	Values	Description
AutoDetect	[0|1]	Disable/enable automatic selection of the encoding
EnableClipboard	[0|1]	The clipboard of the host is transferred into the local clipboard and thus can be pasted into the local application (1) or not (0)
EnableRemoteHost	[0|1]	Permits (1) or deactivates (0) local mouse and keycard activities on the linked workstation
Encoding	[0|1|2|3]	Set different types of encodings: 0: ZRLE (use for low bandwidth) 1: Hextile (use for low bandwidth 2: CoRRE (use for low CPU usage 3: RRE (use for low CPU usage)
Hostname	[]	Name of the workstation in network with the screen content to be depicted on the display wall
JpegQualityLevel	[]	Define Jpeg Quality level (compression, 0: best quality)
Password	[]	Password of the workstation to be displayed
WndScaleMode	[0|1]	Disable/enable scaling of the scraped desktop into the viewer window

6.14.5 Pro Viewer parameters

Parameter	Values	Description
AutoResize	[0|1]	If enabled (1), in window scraping mode or in region scraping mode the ProViewer window is adjusted to match the scraped area
CopyRectEncoding	[0, 1]	0: disabled, 1: enabled (better performance)
DisconnectFrom	[]	The viewer will only cut its connection if it is currently connected to the specified host. Otherwise it will ignore this command. If the value of the argument 'NameOfHost' is empty then the viewer will force to disconnect. If the viewer disconnects then it will also implicitly reset it' s SourceConnected, SourceRequested property.
EightBitPixel	[0, 1]	0: disabled, 1: enabled (very low bandwidth)
EnableClipboard	[0|1]	The clipboard of the host is transferred into the local clipboard and thus can be pasted into the local application (1) or not (0)
EnableRemoteHost	[0|1]	Permits (1) or deactivates (0) local mouse and keycard activities on the linked workstation
Encoding	[0, 1, 2, 3, 4, 5, 6]	Set different types of encondings: 0: Tight (use for low bandwidth) 1: Zlib (use for low bandwidth) 2: Zlib Hex (use for low bandwidth) 3: Hextile (use for low CPU usage) 4: CoRRE (use for low CPU usage) 5: RRE (use for low CPU usage) 6: Raw (use for low CPU usage)
Hostname	[]	Name of the workstation in network with the screen content to be depicted on the display wall
HostServerType	[0..3]	0: ProServer (default), 3: SCN server
HostServerPort	[-1,0..]	-1: use standard (default), or specify port to use for connection
HotKeyDefinitionAltEsc	[{ctrl+} {f1 | f2 |,...|, f12}]	[{ctrl+} {f1 | f2 |,...|, f12}], specify the hot key for the action. Hot keys can only be accepted if the resulting settings do not contain any duplicates. Default is Ctrl+F2
HotKeyDefinitionAltTab	[{ctrl+} {f1 | f2 |,...|, f12}]	[{ctrl+} {f1 | f2 |,...|, f12}], specify the hot key for the action. Hot keys can only be accepted if the resulting settings do not contain any duplicates. Default is Ctrl+F1
HotKeyDefinitionConnect	[{ctrl+} {f1 | f2 |,...|, f12}]	[{ctrl+} {f1 | f2 |,...|, f12}], specify the hot key for the action. Hot keys can only be accepted if the resulting settings do not contain any duplicates. Default is F9
HotKeyDefinitionCtrlAltDel	[{ctrl+} {f1 | f2 |,...|, f12}]	[{ctrl+} {f1 | f2 |,...|, f12}], specify the hot key for the action. Hot keys can only be accepted if the resulting settings do not contain any duplicates. Default is Ctrl+Alt+F4
HotKeyDefinitionCtrlEsc	[{ctrl+} {f1 | f2 |,...|, f12}]	[{ctrl+} {f1 | f2 |,...|, f12}], specify the hot key for the action. Hot keys can only be accepted if the resulting settings do not contain any duplicates.

		Default is Ctrl+F3
HotKeyDefinitionDis-connect	[{ctrl+} {f1 | f2 |,...|, f12}]	[{ctrl+} {f1 | f2 |,...|, f12}], specify the hot key for the action. Hot keys can only be accepted if the resulting settings do not contain any duplicates. Default is F12
HotKeyDefinitionRe-leaseControl	[{ctrl+} {f1 | f2 |,...|, f12}]	[{ctrl+} {f1 | f2 |,...|, f12}], specify the hot key for the action. Hot keys can only be accepted if the resulting settings do not contain any duplicates. Default is F11
HotKeyDefinition-ShowUserManual	[{ctrl+} {f1 | f2 |,...|, f12}]	[{ctrl+} {f1 | f2 |,...|, f12}], specify the hot key for the action. Hot keys can only be accepted if the resulting settings do not contain any duplicates. Default is F1
HotKeyEnabledAltEsc	[1|0]	specify if to handle the hot key, default is enabled
HotKeyEnabledAltTab	[1|0]	specify if to handle the hot key, default is enabled
HotKeyEnabledConnect	[1|0]	specify if to handle the hot key, default is enabled
HotKeyEnabledCtrlAltDel	[1|0]	specify if to handle the hot key, default is enabled
HotKeyEnabledCtrlEsc	[1|0]	specify if to handle the hot key, default is enabled
HotKeyEnabledDiscon-nect	[1|0]	specify if to handle the hot key, default is enabled
HotKeyEnabledRelease-Contol	[1|0]	specify if to handle the hot key, default is enabled
HotKeyEnabled-ShowUserManual	[1|0]	specify if to handle the hot key, default is enabled
HotKeyResetToDefault	[1|0]	specify if to handle the hot key, default is enabled
JPEGCompression	[0, 1]	0: disabled, 1: enabled
JPEGCompressionLevel	[0, ...9]	0: best quality
JpegQualityLevel	[]	Define Jpeg Quality level (compression, 0: best quality)
Password	[]	Password of the workstation to be displayed
RegionH	[0....]	Define height of the region to be scraped
RegionW	[0....]	Define width of the region to be scraped
RegionX	[0....]	Define x position of the region to be scraped
RegionY	[0....]	Define y position of the region to be scraped
ScrapingMode	[0, 1, 2]	0: full screen, 1: window, 2: region
UpdateModeManual-TimeInterval	[1|60]	set update poll time interval if in manual mode, default is 10
UpdateModeModus	[1|2]	set the update mode: 1:Automatic (default), 2:Manual
UseCustomCompression	[0, 1]	0: disabled, 1: enabled (increases CPU load on host/client side)
UseCustomCompres-sionLevel	[0, ...9]	0: disabled, 1: enabled (increases CPU load on host/client side)
WndScaleMode	[1, 2, 3]	1: native resolution, 2: native aspect ratio, 3: free scaled

6.14.6 Web Viewer parameters

Parameter	Values	Description
EnableScrollBars	[0|1]	Hide/show scroll bars of viewer window
Go	[Back|Forward|Stop|Refresh]	Navigation
TextSize	[0..4]	0: Largest 1: Large 2: Medium 3: Small 4: Smallest
URL	[]	Address of http page

6.14.7 MPEG Viewer parameters

Parameter	Values	Description
AudioBalance		
AudioVolume		
EnableLoopMode	[0|1]	disable | enable playback in a loop
Marker	[x]	x is the marker number
Motion	[0..4]	Playback options 0: Stop 1: Pause 2: Play 3: To next marker 4: To previous marker
Position	[...]	Offset (delay) in seconds
URL	[]	Name of digital video
WndScaleMode	[1..4]	number to set scale mode: 1 native, 2 hold aspect ratio, 3 free scaled, 4 WndFitToSrc

6.14.8 VTplus Viewer parameters

Parameter	Values	Description
Channel	[]	TV channel
Page	[100..899]	Number of video text page
SubPage	[0..63]	Number of subpage, default = 0 (all)
TextMode	[0|1]	Activates (1) or deactivates (0) text mode

6.15 Remote Pointer

Like ProViewer, the Remote Pointer is a client application of the ProServer, and therefore it requires that ProServer is installed, cf. Steps required to configure the ProViewer.

Remote Pointer allows to control the applications on the host desktop via the local keyboard and mouse. Up to four different host desktops can be managed, each of them activated by moving the local mouse into the respective activation zone on the local desktop. This behavior is called squid mode.

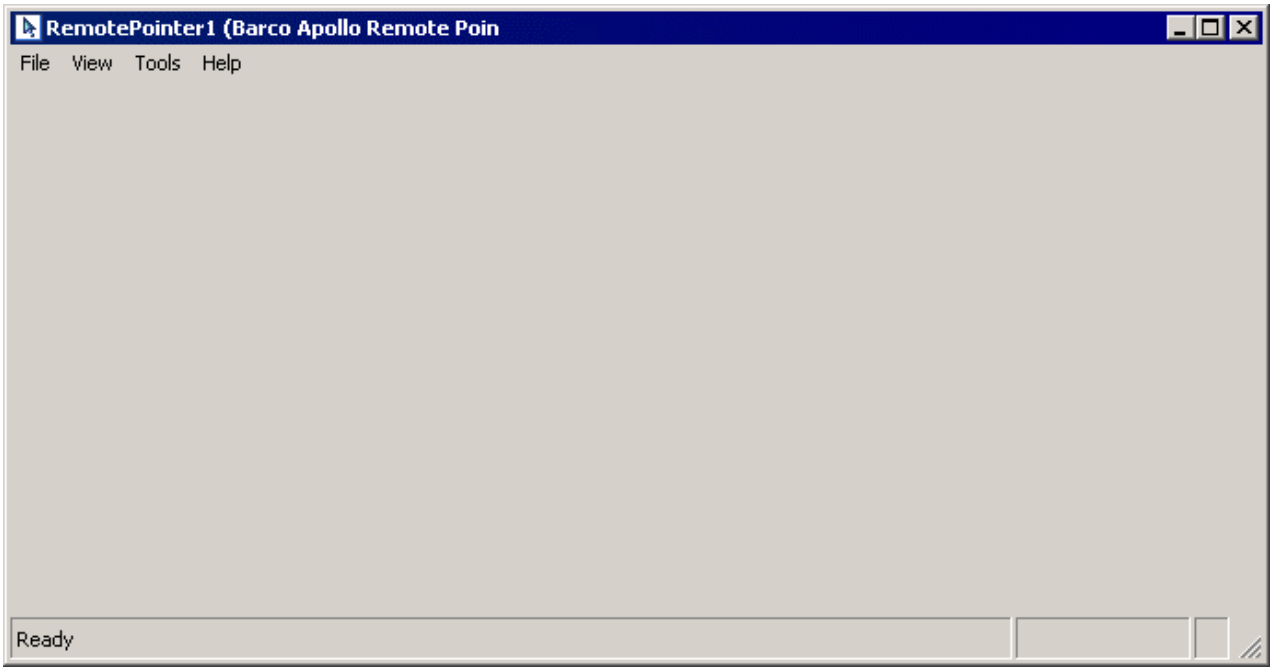
The assignment of the activation zone to a host desktop as well as the definition of shortcuts can be configured individually.

6.15.1 Launching the Remote Pointer application

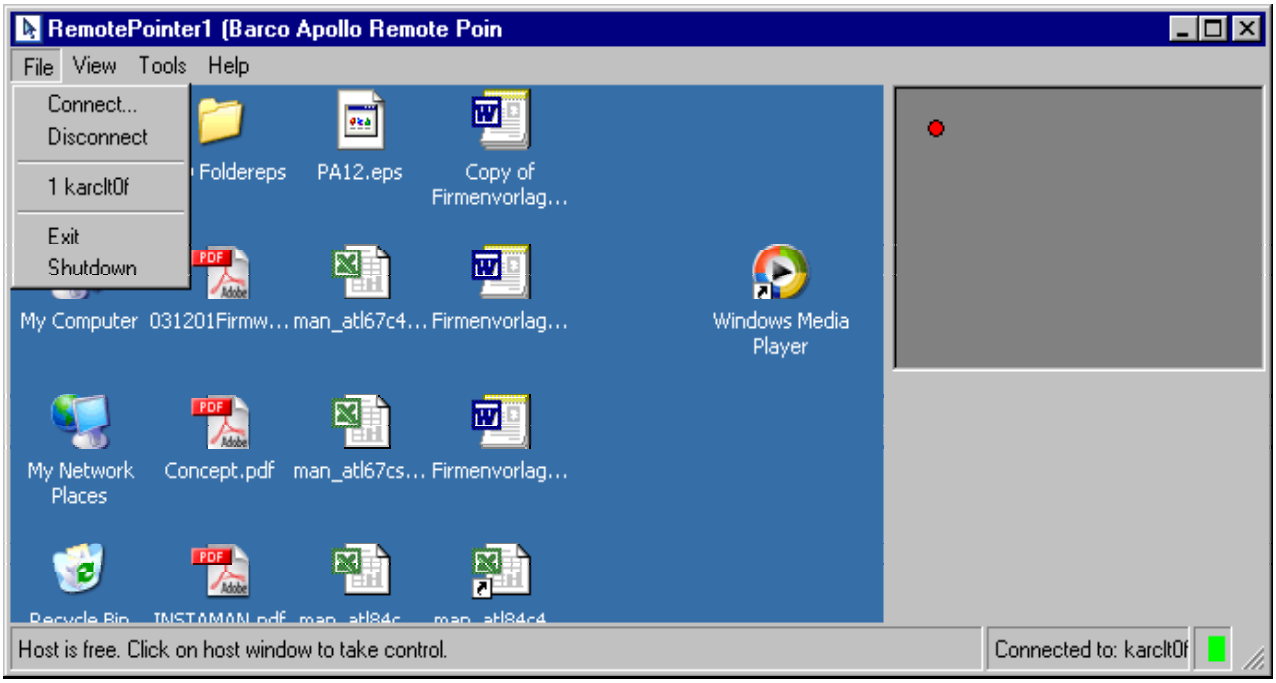
Select Start|Programs|Barco Apollo|Remote Pointer to lauch the application. The main window of Remote Pointer is displayed.

The menu bar comprises the menus **File**, **View**, **Tools**, and **Help**.

If control of a host is estabished, the menus and their commands are no longer available. To make use of them, first control has to be released by means of the respective special key!



6.15.2 File menu



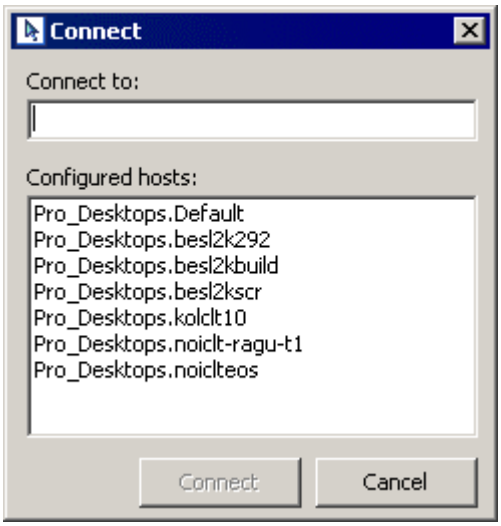
Use this menu to **connect**/**disconnect** to/from a host. **Exit** hides the GUI, but the application is still running and can be activated again by clicking on its icon in the system tray. **Shutdown** closes the application.

The entries Exit and Shutdown and the commands assigned to depend on the checkbox Iconize application on Tools|Options, cf. Options

6.15.2.1 Connect

The command **Connect** opens a list with all hosts which could be connected to. These hosts are specified in the viewersource.ini file in the section **ProServer**.

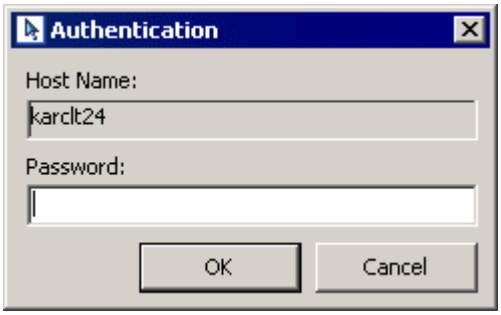
Since both, the Remote Pointer application and the ProViewer application are clients of ProServer, they make use of the same pre-configured sources.



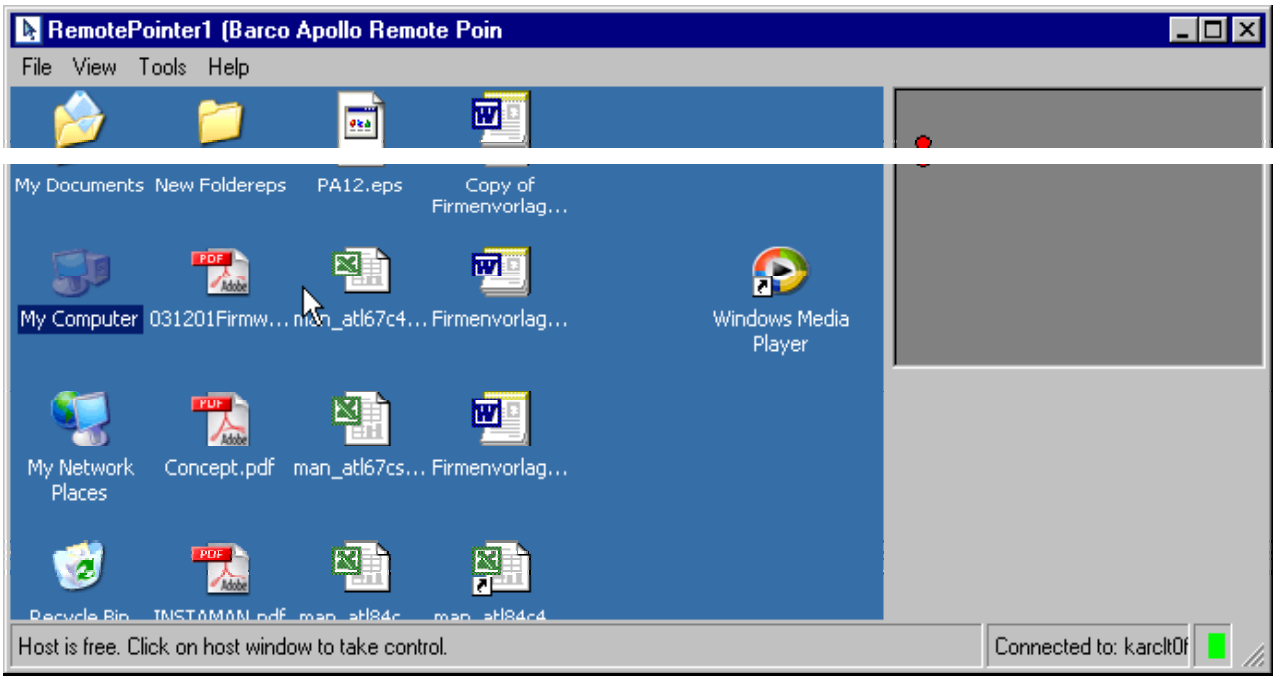
Select one of the pre-configured hosts, or enter a new one, and press **Connect**.

6.15.2.2 Authentication

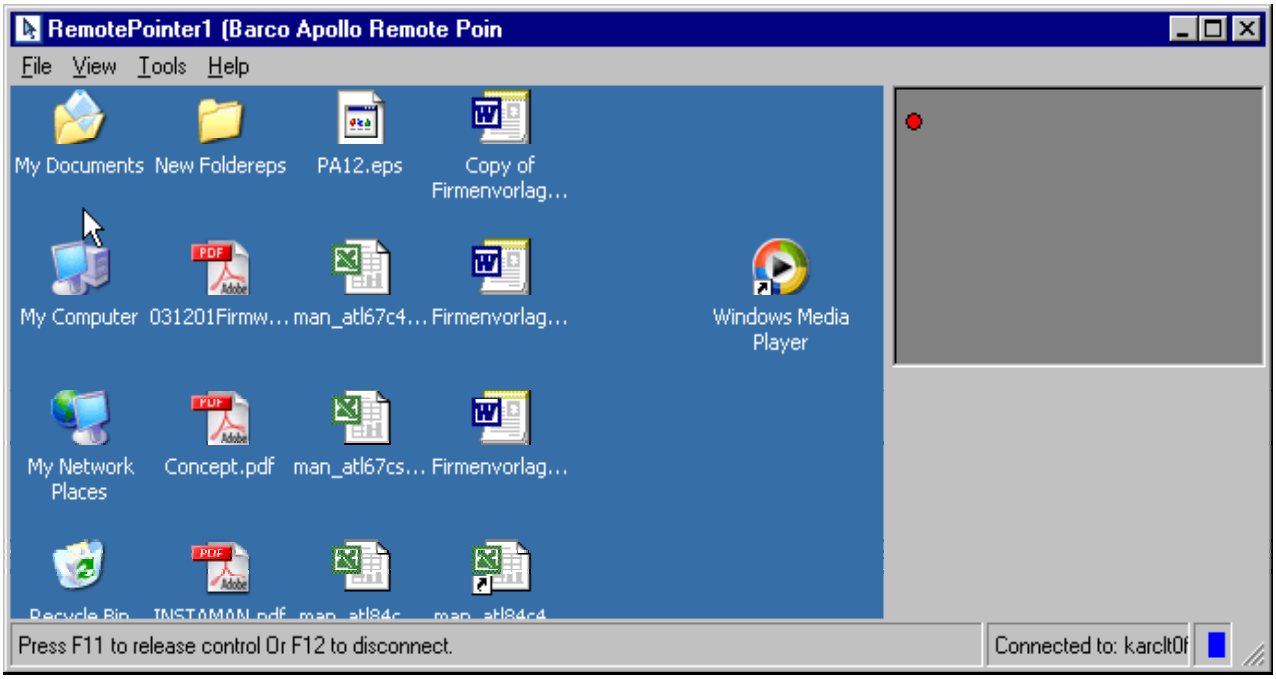
In case the host is not specified in the **viewersource.ini** file, a dialog pops up where you have to enter the password (for the pre-configured hosts, the password is taken from the viewersource.ini-file):



After the connection is established, the RemotePointer window is split: in the left area, the desktop of the host is visible (host window), on the right side, the cursor position on the host's desktop is indicated by a black dot (locator window). Since the host's desktop cannot be entirely displayed in the host window, the position indication in the locator window ensures easy navigation.

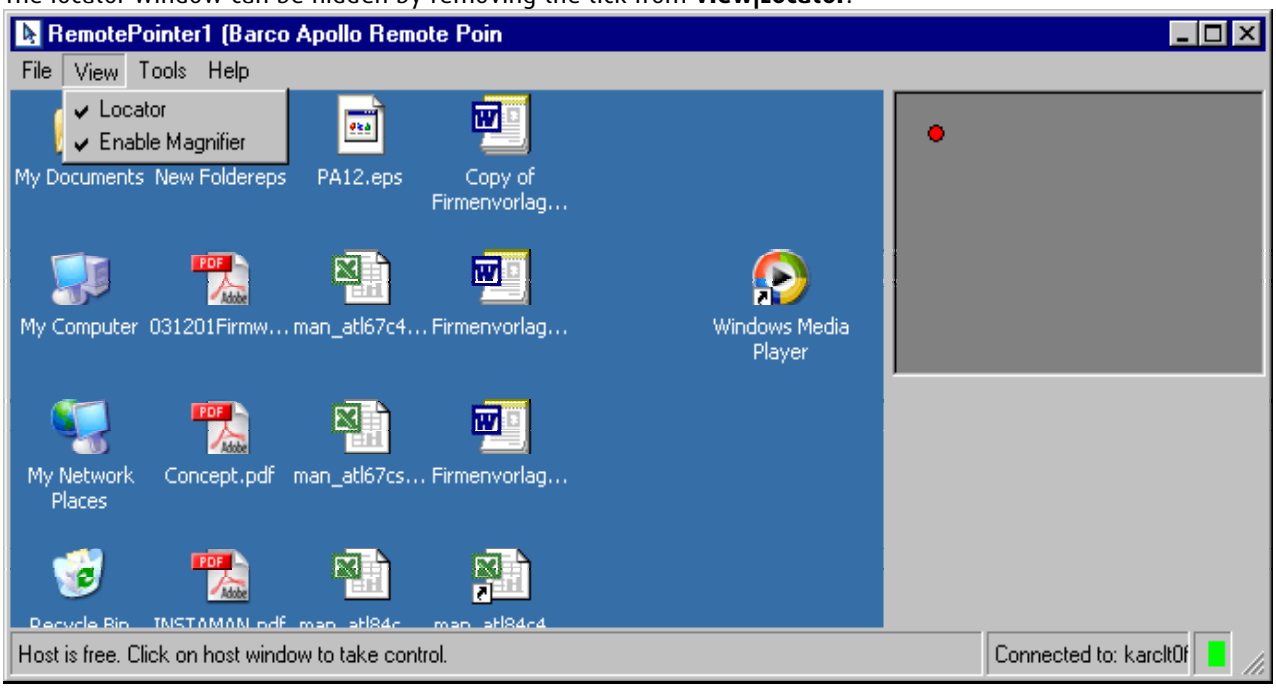


Look at the status bar to get information learn which host is connected and how to take control on the host's desktop. After the connection is established, the status bar informs about the hotkeys to release control or to disconnect, respectively.



6.15.3 View menu

The locator window can be hidden by removing the tick from **View|Locator**:

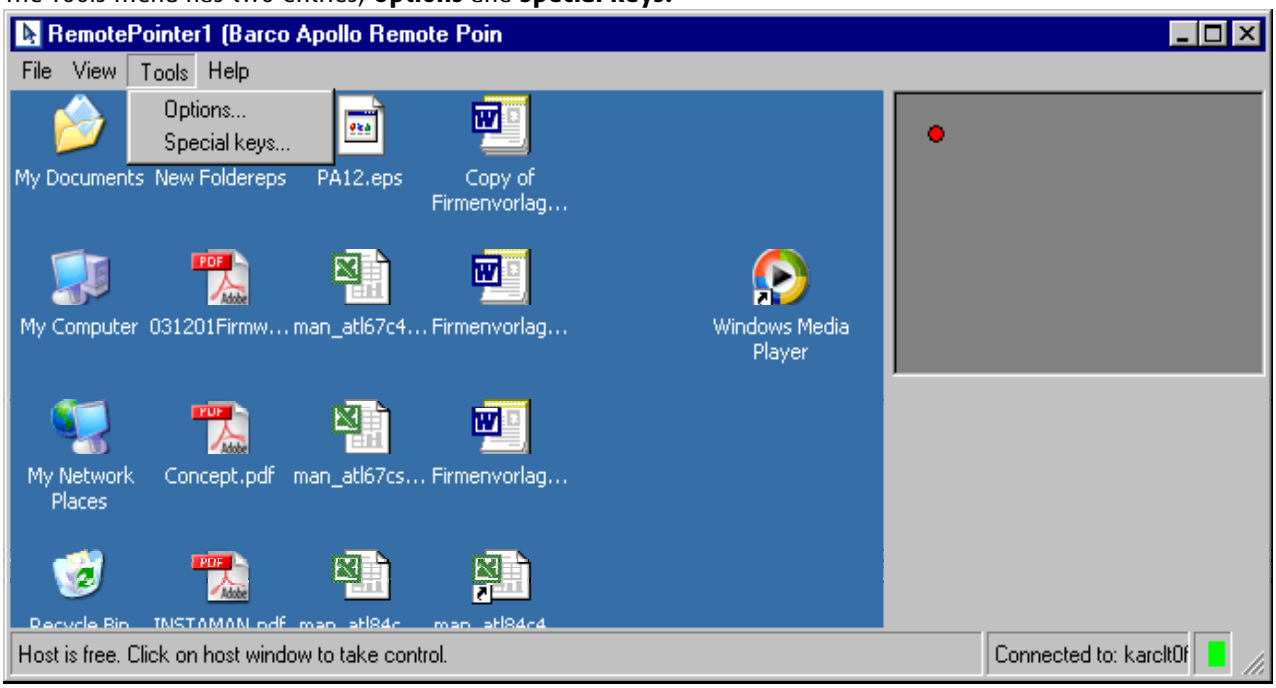


Removing the tick from View | Locator, will hide the locator window, but will not enlarge the host window.

View|Enable Magnifier displays the scraped desktop in the host window of the RemotePointer application. In case it is unselected, the host window turns black and does not show the scraped desktop.

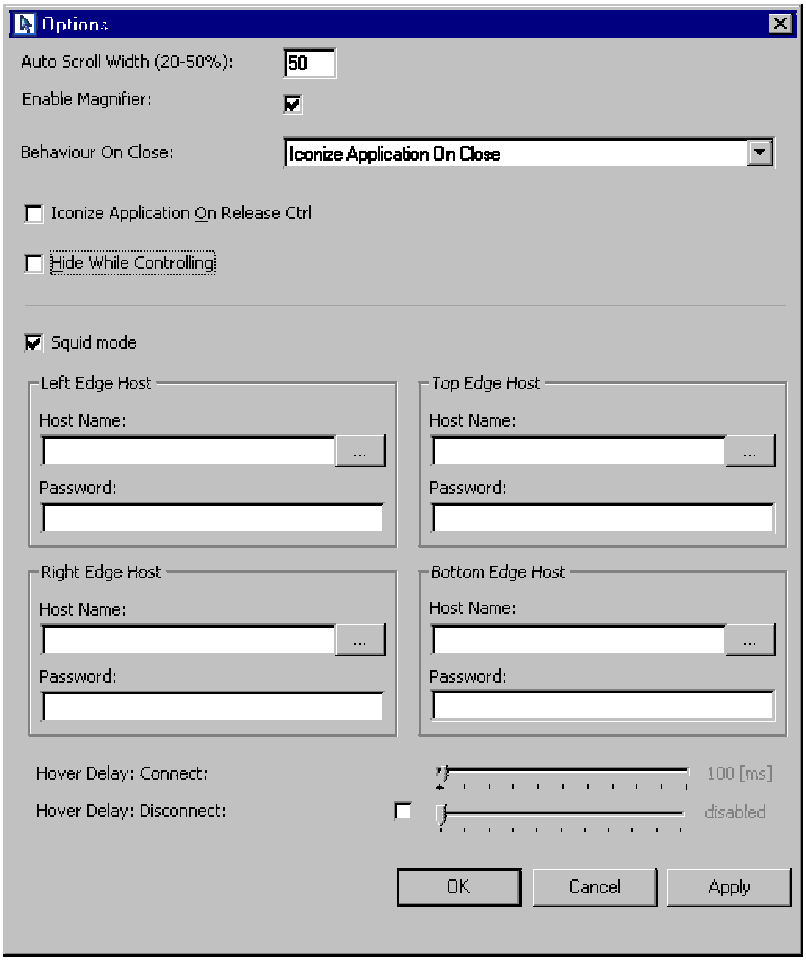
6.15.4 Tools menu

The Tools menu has two entries, **Options** and **Special keys:**



6.15.4.1 Options

Selecting **Options** opens a dialog to configure the RemotePointer Application.



Auto scroll width

Auto scroll width can be defined in the range of 20% to 50%. This range defines the area where the cursor can be moved next to the current location without updating the host window. As soon as it moves out this range, the host window is updated thus again centering the cursor in mid of the auto scroll width area.

Enable Magnifier

In case the this checkbox is ticked, the scraped desktop is displayed in the host window of the RemotePointer application. In case the mark is removed from the checkbox, the host window turns black and does not show the scraped desktop.

Behavior on Close

If **Iconize Application** is selected, the **File** menu shows both entries, **Exit** and **Shutdown**. Selecting **Exit**, the application is hidden, but still running, and can be activated again by double clicking on its icon in the system tray. **Shutdown** closes the application.

If **Shutdown Application on Close is selected**, the **File** menu only shows **Exit**, and this command then not only hides, but closes the application.

The same applies for the "close" button on the window border: In case Iconize application is selected, clicking this button doesnot shutdown the application, but iconizes it in the system tray.

The application can be iconized during controlling (**Hide while controlling**) or when control is released again (**Iconize Application on Release Control**). In case it is hidden while controlling, be sure to remember the keys for releasing control and/or disconnect: they are no longer displayed....

Squid mode

In squid mode, when moving the local cursor to an edge of the local desktop, automatically control is taken on the host which is assigned to this edge!

Up to four different hosts can be assigned – one for each edge.

Enter the name of the desired host and the password which has been given during the configuration of **ProServer** application:

In case you want to disable **squid mod**e, remove the mark from the checkbox.

To prevent the user from unintentionally taking control on the host, the time interval can be specified for taking and releasing control (**hover delay connect**, **hover delay disconnect** (from 0 to 5000ms).

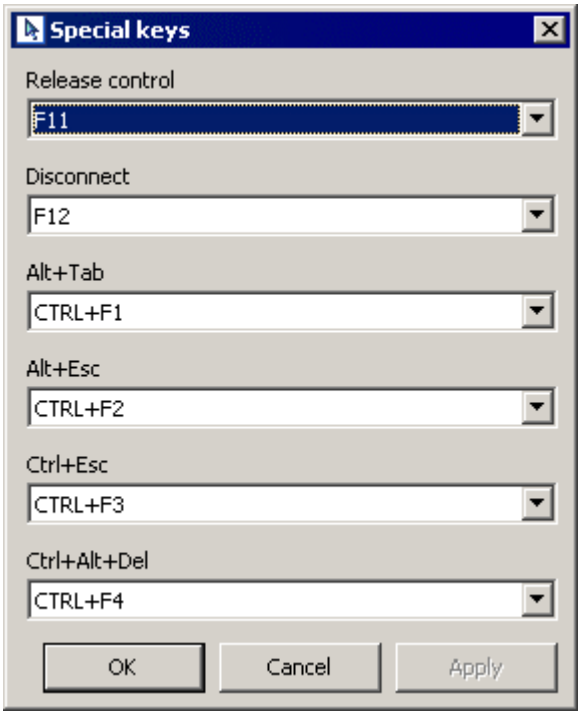
If squid mode is activated, and if the mouse is moved to one of the edges and stays there the time as defined in hover delay connect, the mouse will "move to the host".

If the mouse is moved to one of the edges of the host and stays there the time as defined in hover delay disconnect, the mouse will leave the host and "come back" without the need of pressing F12 (assumed: default key assignment for connect/disconnect).

6.15.4.2 Special keys

Selecting **Special keys** opens a dialog where the special keys (hot keys) of the Remote Pointer application can be defined. These special keys perform Release Control and Disconnect, respectively. In addition, some of the most common Windows keys can be specified (Alt+Tab: switch between open items, Alt+Esc: Cycle through items in the order they were opened, Ctrl+Esc: display Start menu, Ctrl+Alt+del: launch Task Manager).

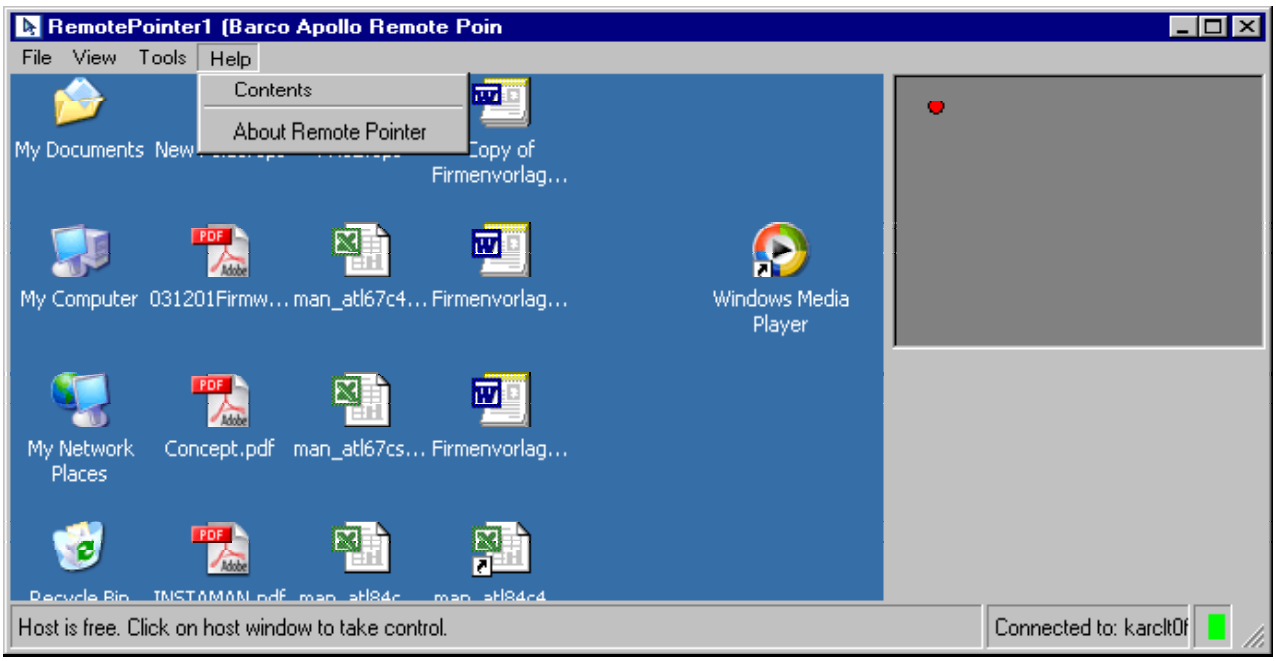
Alt+Tab is not fully implemented. An Alt+Tab command can be sent, but pressed Alt+Tab (to switch the selection in the form with all launched applications) cannot be sent.



The special keys for releasing control and disconnecting are always displayed in the task bar.

6.15.5 Help menu

The Help menu has the two entries **Contents** and **About**. **Contents** gives access to the online help, **About** informs about the software version:



6.15.6 Status bar

In the status bar, information is given how to take/release control and how to disconnect, respectively. Since having taken control on a host desktop, the menu items of the Remote Pointer applications are no longer available, and the only hint how to release control is given in the status bar.

On the system tray the name of the connected host is indicated and the status of the host. The following colors are assigned:

Color	description
green:	host is free, control can be taken
yellow:	if a client has input control but has not exercised it for a certain time (configured on the ProServer configuration tab, entry arbitration time), a new request will be granted and the owning channel will loose its control
blue:	a client has input control and has been busy, a request of another client is denied.
red:	The host is locked since another client has input control

6.15.7 Remote Pointer parameters

Parameter	Values	Description
AutoScrollWidth	[value]	Between 20 and 50, size of the auto scroll area in percent
BottomHost	[name]	Name of the host to be controlled if in squid mode the cursor moves on the bottom edge
BottomHostPassword	[password]	Password of the host to be controlled if in squid mode the cursor moves on the bottom edge
DisconnectFrom	[]	The viewer will only cut its connection if it is currently connected to the specified host. Otherwise it will ignore this command. If the value of the argument 'NameOfHost' is empty then the viewer will force to disconnect. If the viewer disconnects then it will also implicitly reset it' s SourceConnected, SourceRequested property.
EnableMagnifier	[0 |1]	Disabled (0) or enabled (1)
End		Ends the viewer application
FontName	[font]	Set the main font
FontSize	[size]	Set size of the main font
Height	[pixel]	Height of the Remote Viewer main window
Help		Writes the help command line parameter into the log file
HideAppWhileControlling	[0|1]	specifies if to hide the application while controlling, 0(default)
HostName	[name]	Name of the workstation in network with the screen content to be depicted on the display wall
HostServerType	[0..3]	0: ProServer (default), 3: SCN server
HostServerPort	[-1,0..]	-1: use standard (default), or specify port to use for connection
IconizeApplication	[0 |1]	Disabled (0) or enabled (1)
IconizeAppOnReleaseCtrl	[0|1]	Specifies if to iconize the app on release control, 0(default)
Ident	[]	Unambiguous name of the Remote Viewer instance
LabelFontName	[font]	Set the font of the label
LabelFontSize	[size]	Set the size of the font for the labels
Left	[Pixel]	Left position of the application window
LeftHost	[name]	Name of the host to be controlled if in squid mode the cursor moves on the left edge
LeftHostPassword	[password]	Password of the host to be controlled if in squid mode the cursor moves on the left edge
LocatorVisible	[0 |1]	Disabled (0) or enabled (1)
Password	[password]	Password of the workstation to be displayed
RightHost	[name]	Name of the host to be controlled if in squid mode the cursor moves on the right edge
RightHostPassword	[password]	Password of the host to be controlled if in squid mode the cursor

		moves on the right edge
SourceConnected	[name]	Freely definable name of the currently applicable source. The viewer will activate the preceding settings and display the source.
SourceRequested	[name	Name of a source as defined in the ServerData\viewersources.ini file. The viewer will activate the settings selected for this source and display the source.
Splash	[0 | 1]	Displays (1) or hides (0) the splash screen when launching the application
SquidHoverLatencyIntervals	[shlt:x;y]; x:0...1; Y:-1...0	customize squid mode latency to connect or disconnect if hoovering the edges. String of the form -shlt:x;y. x determines the latency specified in milliseconds to be passed hovering the mouse before connecting in squid mode. y determines the latency specified in milliseconds to be passed hovering the mouse before disconnecting if connected in squid mode. Valid range for x is: [0, ..], 0 means to react immediately. Valid range for y is: [-1, 0, ..], -1 means disabled, 0 means react immediately. Default value for x is 0. Default value for y is -1.
SquidMode	[0 |1]	Disabled (0) or enabled (1)
TakeControl	[0 |1]	Disabled (0) or enabled (1)
Top	[Pixel]	Top position of the application window
TopHost	[name]	Name of the host to be controlled if in squid mode the cursor moves on the top edge
TopHostPassword	[password]	Password of the host to be controlled if in squid mode the cursor moves on the top edge
Width	[Pixel]	Width of the Remote Viewer main window

7 Explorer

The **Apollo Explorer** offers a new user interface with access to all functions of the **Device Manager**, **Remote Desktop**, and **Layout Selector**. The applications are integrated in the **Explorer** but can also still be launched as stand-alone programs.

The descriptions of the functions of the **Device Manager**, **Remote Desktop**, and **Layout Selector** in the manual apply exclusively to working from within the Apollo Explorer.

7.1 Starting the Explorer

Use the following shortcut to launch the Explorer:

Start|Programs|Barco Apollo|Explorer.

7.2 Explorer User Interface

The Explorer offers access to all functions of the Apollo applications **Device Manager**, **Remote Desktop,** and **Layout Selector**.

7.2.1 Default settings

A vertically split window with **menu bar**, **tool bar**, and **status bar** opens when the **Explorer** is launched for the first time after installation. You can customize this view and the **Explorer** opens with the modified view when launched again.

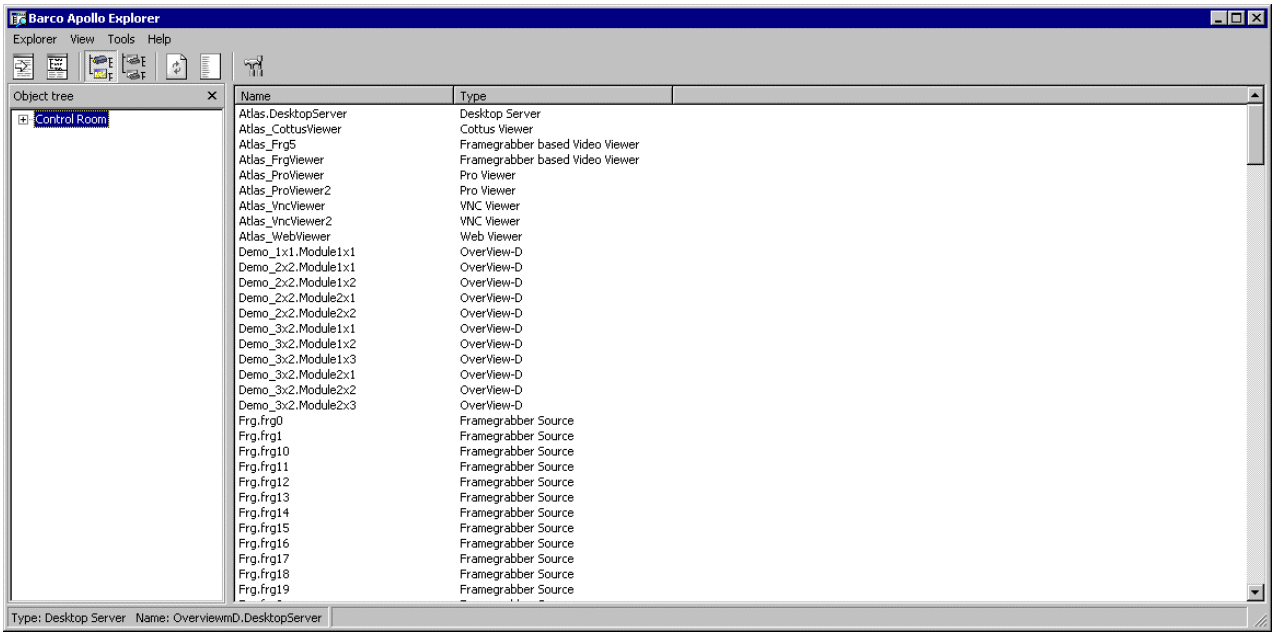
Delete the AolloExplorer.ini file located in the user-specific folder to reset the user interface!

Windows NT: ..../Winnt/Profiles/User/Local Settings/Apollo/ApolloExplorer.ini

Windows 2000: .../Documents and Settings/User/Local Settings/Apollo/ApolloExplorer.ini.

Exit the Explorer before resetting!

The Explorer user interface is then set back to the default settings when launched again.



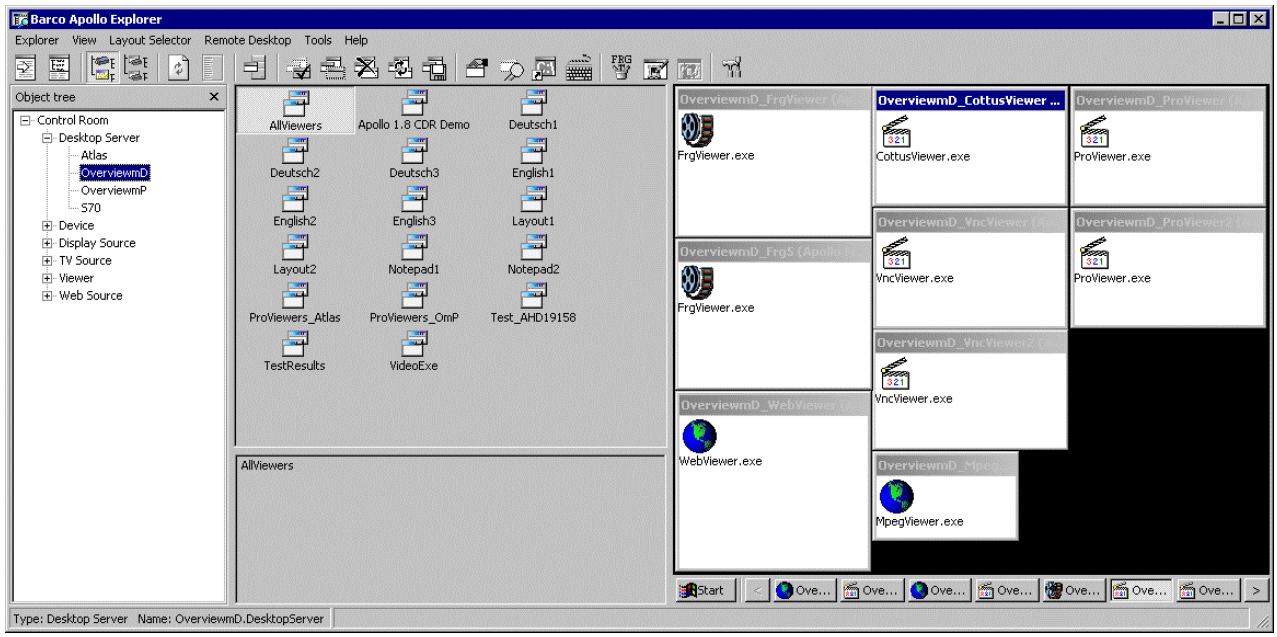
7.2.2 Split window

All objects of an Apollo Project are listed in an **object tree**. A selected object is displayed in the **workspace** (second pane of window), either in the form of a **list** with name and type or **graphically** (mini window).

Use the **context menu** (right mouse click) to control the selected object within the workspace.

7.2.3 Adjusted menu bar

Menu bar and **tool bar** are adjusted depending on the object type. If the Desktop Server is selected, the menu bar and the tool bar are expanded to give access to the functionalities of the **Remote Desktop** and the **Layout Selector**.



7.2.4 Task bar

The task bar always depict **type** and **name** of the selected object in the object tree.

7.3 Object Tree

The **object tree** displays an alphabetical list of all object types of the current Apollo Project.

The Explorer's **object tree** depicts object types from the following sources:

Object Type	Source
Device	File **devices.ini**, generated by the Control Room Configurator when exporting the Visio file of the Apollo Project
Display source	File **ServerData\viewersources.ini**, entries have to be edited manually, cf. The ServerData\viewersources.ini File
Web source	File **ServerData\viewersources.ini**, entries have to be edited manually, cf. The ServerData\viewersources.ini File
TV source	File **ServerData\viewersources.ini**, entries have to be edited manually, cf. The ServerData\viewersources.ini File
Desktop Server	File **DesktopServer.ini**, generated by the Control Room Configurator when exporting the Visio file of the Apollo Project
Viewer	Configured and launched viewers

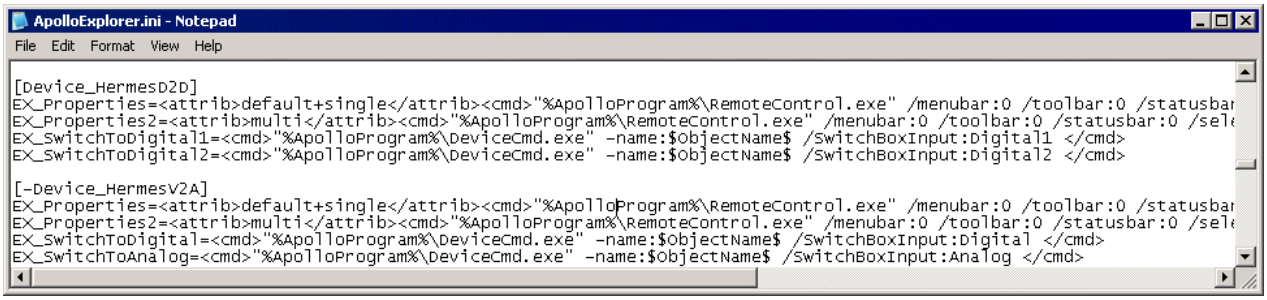
This information is written to the file ApolloExplorer.ini, by the **Control Room Configurator** when exporting a valid Apollo Project. This file is located in the subfolder **ServerData** of the Apollo Project and is automatically distributed to all Apollo network servers.

The different sources have to be defined in the ServerData\viewersources.ini file before they can be displayed in the object tree!

Object tree entries are updated immediately as soon as the ServerData\viewersources.ini file has been saved.

The ServerData\viewersources.ini file has to be customized in the subfolder ServerData of the Apollo Project. Changes in files with the same names located in other directories are always overwritten by the file located in the ServerData subdirectory.

Starting with Apollo Release 1.6, it is possible to exclude an object type from being listed in the object tree. If the object type listed in the ApolloExplorer.ini file starts with a dash, it is not added to the list:



In the object tree of the Apollo Explorer the devices HermesD2D are listed, whereas Hermes V2A is excluded (the object type starts with a dash). The pictures show the influence of this section in the ApolloExplorer.ini of the object tree before and after excluding Hermes V2A:

As default, the **Digital Stream Source** is excluded since these sources cannot be applied with **/Source requested**. The Security Provider is excluded to be compatible with previous versions.

The ApolloExplorer.ini file is located in the subfolder **ServerData** of the Apollo Project and is automatically distributed to all Apollo network servers.

A user-specific ApolloExplorer.ini file also exists to save the customized settings of the user interface.

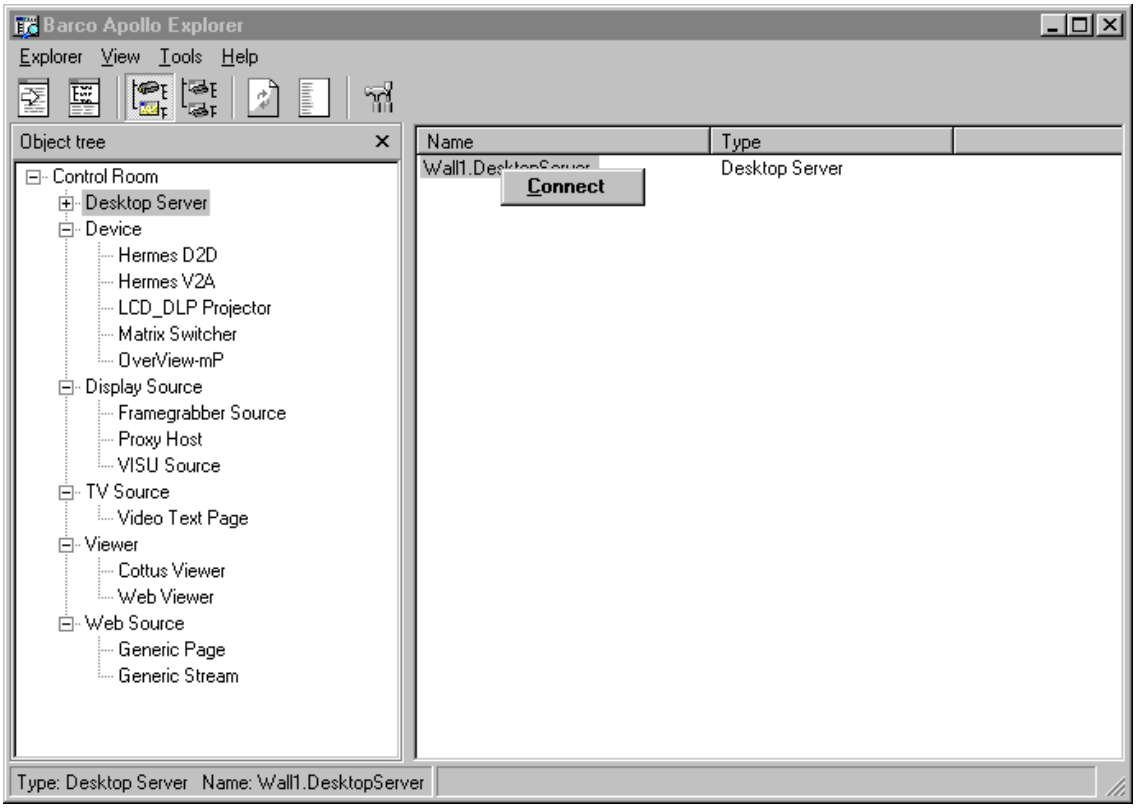
Windows NT: ..../Winnt/profiles/user/Local Settings/Apollo/ApolloExplorer.ini

Windows 2000: .../Documents and Settings/User/Local Settings/Apollo/ApolloExplorer.ini.

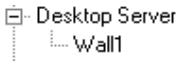
7.3.1 Desktop Server

All active Desktop Servers of the Apollo Project are listed with the Desktop Server entry and the subentry of the associated display wall.

Select the Desktop Server entry to display the complete name of the Desktop Server in the workspace. Use the context menu of the Desktop Server to establish a link with the Display Wall.

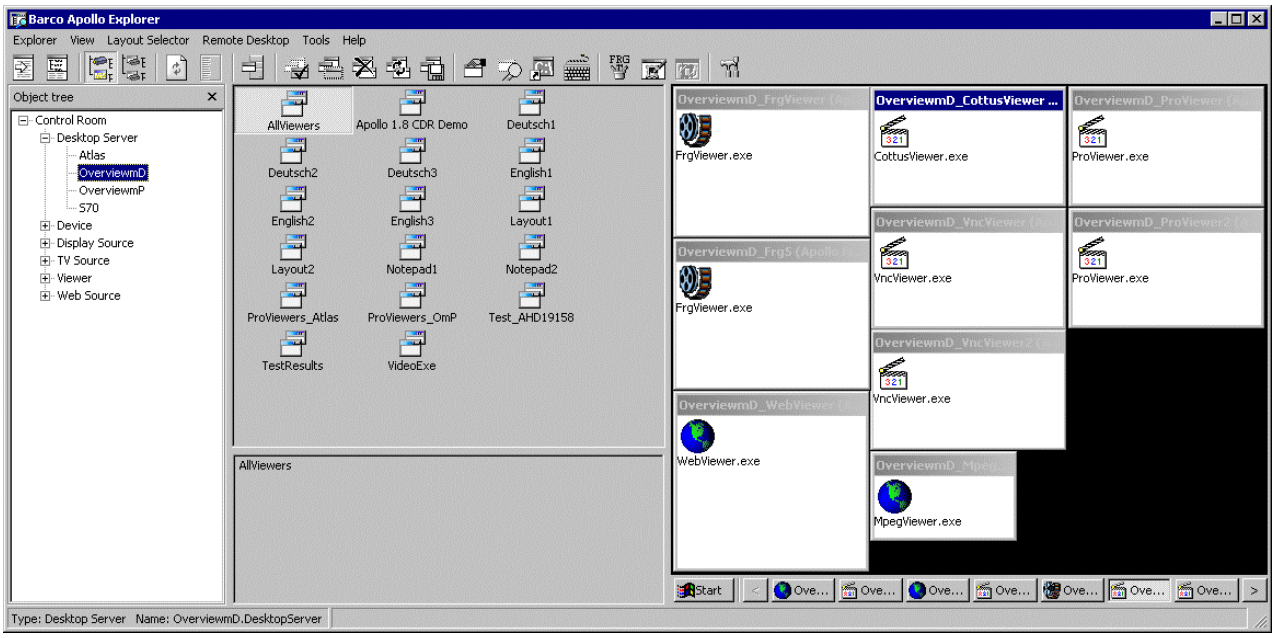


Click on the + sign next to Desktop Server to view the name of the display wall.



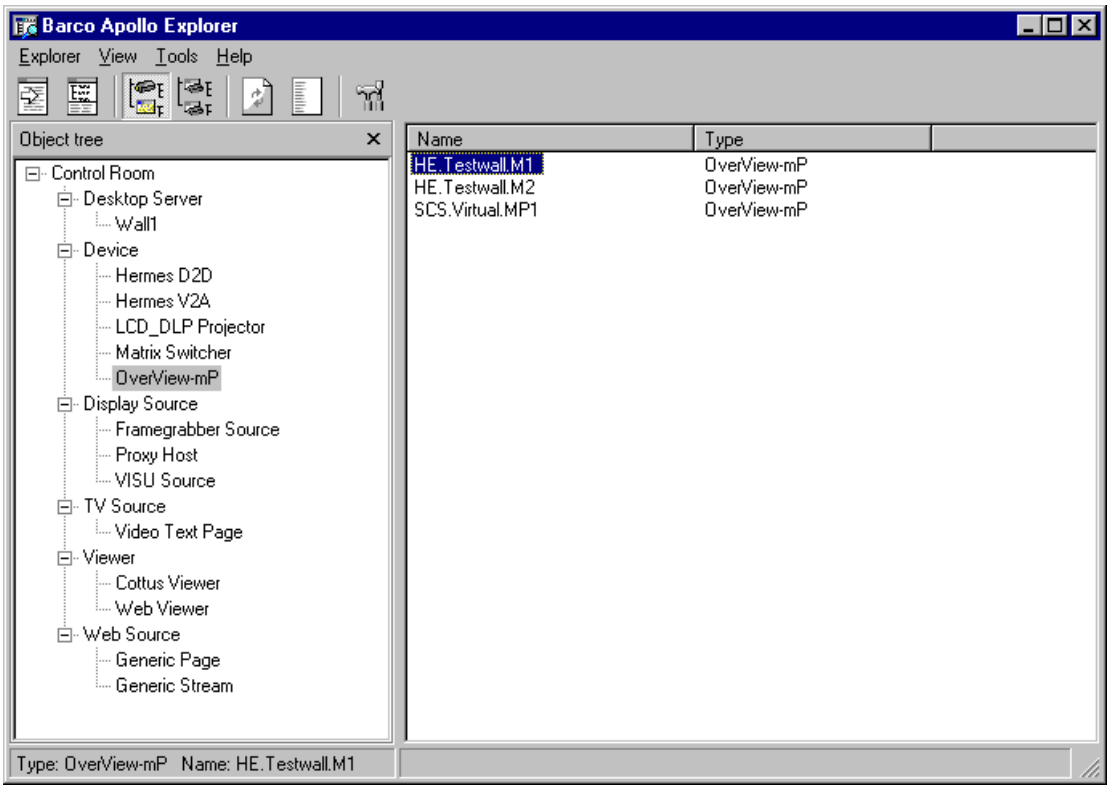
The link with the Display Wall is established as well by clicking on the name of the Display Wall listed in the object tree.

Select the Display Wall and the menu and tool bar of the Explorer are expanded with the entries and the functionality of the Remote Desktop and the Layout Selector. The workspace shows the configuration of the Display Wall (Remote Desktop), the defined and loaded layouts (Layout Selector).



7.3.2 Device

Click on the + sign next to Device to view all device types of the Apollo Project.



Select a device type to view the names of the devices assigned to this device type.

The device types and device names are specified by the Control Room Configurator.

7.3.3 Overview: device

Lists only device supported by Apollo and with the corresponding template prepared by the Visio Configurator. Of course, the device has to be actually part of the current Apollo Display Wall configuration to be listed in the object tree.

Click on the name in the workspace (right mouse button) of a device to open the context menu. The context menu includes the Properties menu item used to open the Properties dialog box to control the device.

This allows you access to the device manager functionality, cf. Device Manager in the Explorer.

Use the Explorer.ini file to define additional menu items for the context menu.

Customization of the context menu also allows to define commands that are active even when multiple devices are selected at once. This makes it possible, for example, to turn of all projectors with just one mouse click.

7.3.4 Display Source

The display source object is depicted in different forms: Proxy Host, Frame Grabber Source, Visu Source, VNC Source. These are the sources defined in the current Apollo project. There could also be listed Framegrabber Stream Source, ProServer Source.

These variations are displayed when clicking on the + sign of the display source.

7.3.4.1 Framegrabber source

This object type represents all TransForm A input cards of the project used to display analog video and RGB sources (BigVideo Card, QuadVideo Card, RGB-Input Card, QuadAnalog Input Card, Dual RGB Input Card) .

Select **Framegrabber Source** in the object tree to list in the workspace all of the input card names defined in the **ServerData\viewersources.ini** file.

7.3.4.2 Framegrabber stream source

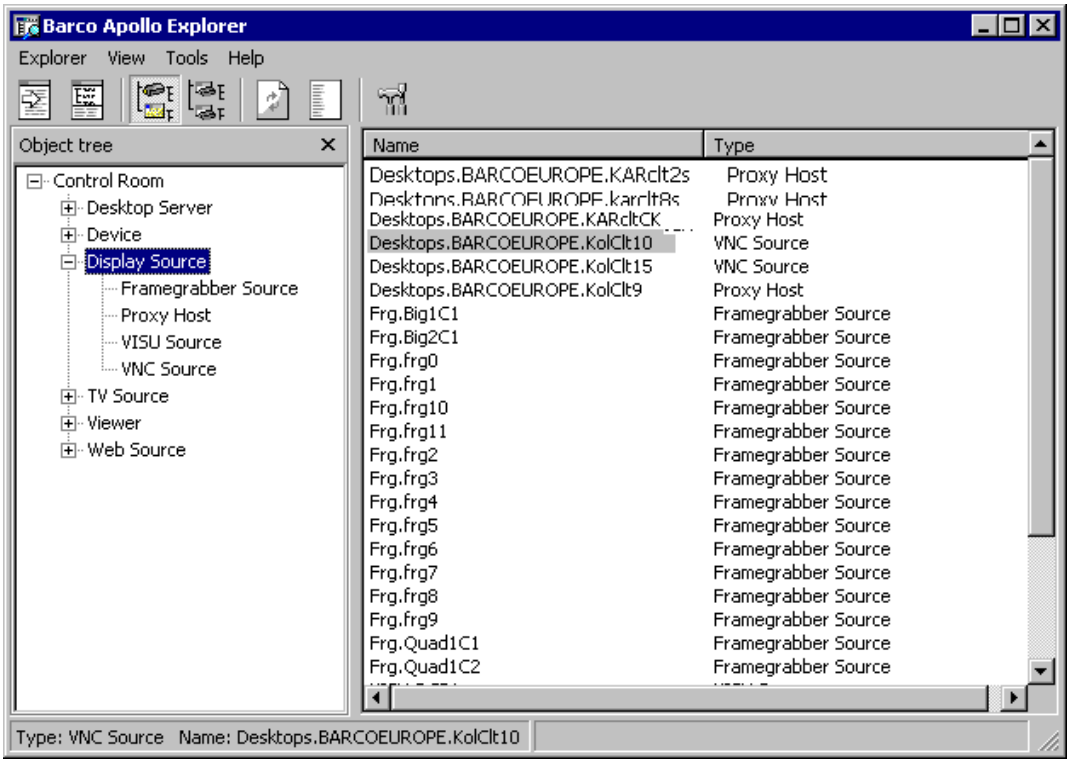
This object type represents all Streaming Video Cards of the project used to display a digital video stream.

Select Framegrabber Stream Source in the object tree to list in the workspace all of the input card names defined in the ServerData\viewersources.ini file.

7.3.4.3 Proxy host:

This object type represents all workstations of the project with screen contents to be shown on the Display Wall with the help of the Cottus Viewer.

Select Proxy Host in the object tree to list in the workspace all of the workstation names defined in the ServerData\viewersources.ini file.



7.3.4.4 Visu source

This object type represents all Visu input cards of the project used to display analog video and RGB sources (video input, input card).

Select Visu Source in the object tree to list in the workspace all of the Visu Input Unit names defined in the ServerData\viewersources.ini file.

7.3.4.5 VNC source:

This object type represents all workstations of the project with screen contents to be shown on the Display Wall with the help of the VNC Viewer.

Select VNC Source in the object tree to list in the workspace all of the workstation names defined in the ServerData\viewersources.ini file.

7.3.4.6 Pro Server source:

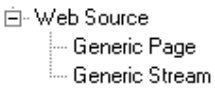
This object type represents all workstations of the project with screen contents to be shown on the Display Wall with the help of the ProViewer.

Select Pro Server Source in the object tree to list in the workspace all of the workstation names defined in the ServerData\viewersources.ini file.

7.3.5 Web Source

The Web Source object type takes two different forms: General page and general data stream.

These variations are displayed when clicking on the + sign of the Web source.



7.3.5.1 General page

This object type represents all predefined Internet pages of the project to be shown on the Display Wall with the help of the Web Viewer.

Select General Page in the object tree to list in the workspace all of the Internet address names defined in the ServerData\viewersources.ini file.

7.3.5.2 General data stream

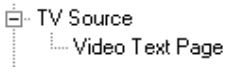
This object type represents all predefined digital media streams to be shown on the display wall with the help of the MPEG Viewer.

Select General Data Stream in the object tree to list in the workspace all media stream addresses defined in the ServerData\viewersources.ini file.

7.3.6 TV Source

The TV Source object type takes the form of a videotext page.

This variation is displayed when clicking on the + sign of the TV source.



7.3.6.1 Videotext page

This object type represents all predefined videotext pages of the project to be shown on the Display Wall with the help of the VTplus Viewer.

Select Videotext Page in the object tree to list in the workspace all of the videotext page names defined in the ServerData\viewersources.ini file.

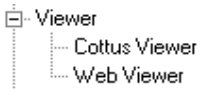
7.3.7 Overview: object tree sources

The entries Display Source, Web Source, and TV Source together with their subentries serve only as a graphical source of information using the defined viewer-specific sources. They cannot be edited or controlled. These entries do not feature a context menu.

7.3.8 Viewer

Click on the + sign next to the viewer to list all configured and launched viewers (FRG Viewer, Visu Viewer, Cottus Viewer, VNC Viewer, Web Viewer, Mpeg Viewer, VTplus Viewer, ProViewer, Remote Pointer).

This entry will be missing from the object tree if none of the viewers have been started.



7.3.8.1 Web Viewer

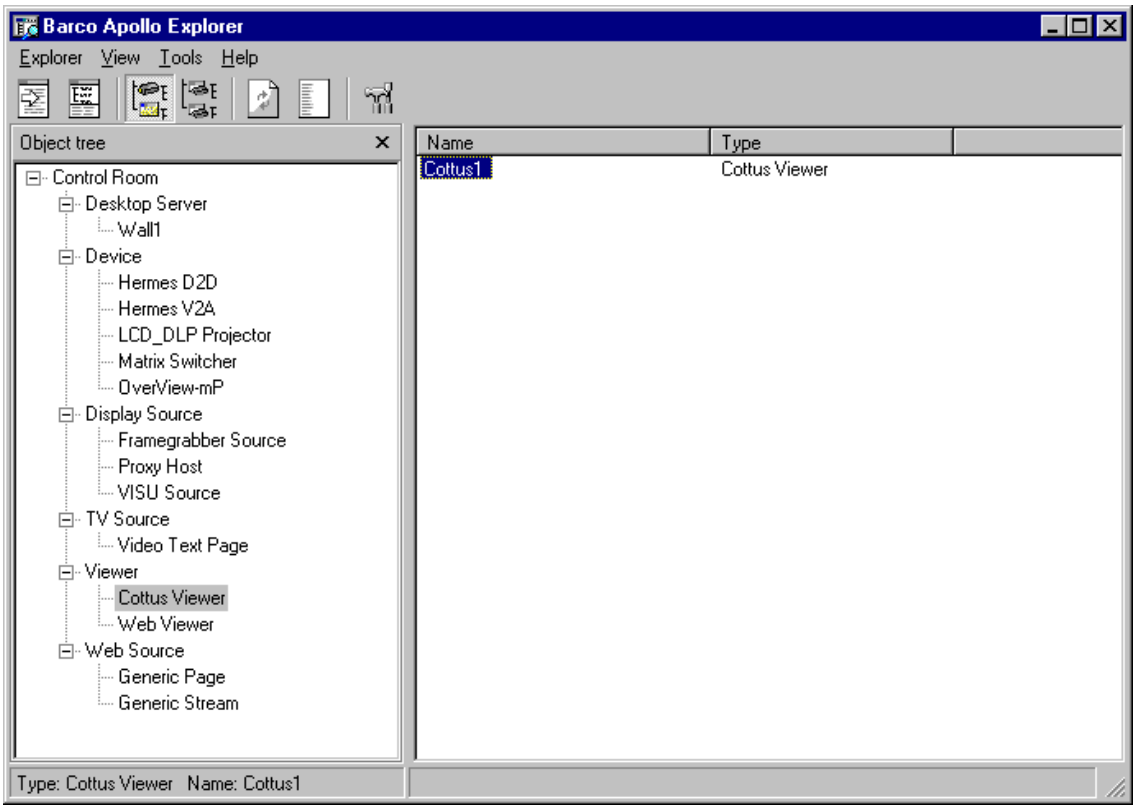
This object type represents all started Web Viewers of the Apollo Project.

Select Web Viewer in the object tree to list in the workspace all names of the launched Web Viewer instances (Ident).

7.3.8.2 Cottus Viewer

This object type represents all started Cottus Viewers of the Apollo Project..

Select Cottus Viewer in the object tree to list in the workspace all names of the launched Cottus Viewer instances (Ident).



The same applies to the FRG Viewer, Visu Viewer, VNC Viewer, ProViewer, Remote Pointer, MPEG Viewer, and the VTplus Viewer:

The corresponding entry and the name of the instances are listed in the workspace as soon as a viewer is launched.

7.3.8.3 Overview: Viewer

Lists only launched viewers regardless of how the viewers were launched, whether together with a layout, a shortcut on the Display Wall, or the command interface.

Click on a viewer name in the workspace (right mouse button) to open the context menu. The context menu includes the Properties menu item used to open the Properties dialog box to control the device.

This allows you access to the viewer control functionality, cf. Controlling Viewers.

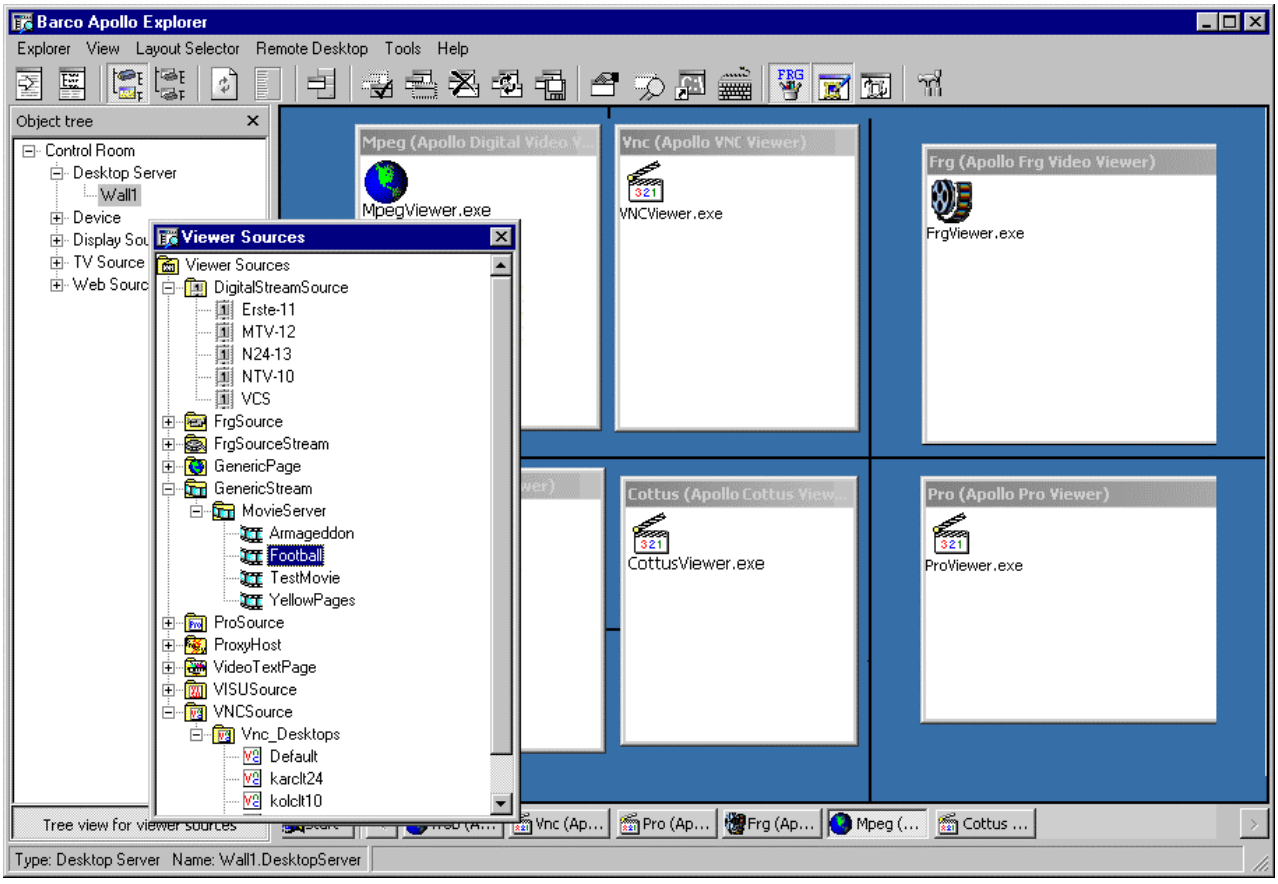
Use the Explorer.ini file to define additional menu items for the context menu.

Customization of the context menu also allows to define commands that are active even when multiple devices are selected at once. This makes it possible, for example, to hide or show the contents of all viewer windows with just one mouse click.

7.4 Source Tree View

Since Apollo 1.9 the Apollo Explorer provides a separate window with a second tree view listing all available viewer sources. The window is displayed / hidden via the command button on the bottom of the object tree labled **Tree view for viewer sources**.

Via drag and drop, a source listed in the tree view can be assigned to a viewer, cf. Working with the Remote Desktop.



7.5 Explorer workspace

The selection of the node in the object tree determines what is displayed and how it is displayed; see Object Tree

Objects in the workspace have a context menu, with the exception of the sources, which can be accessed by clicking with the right mouse button..

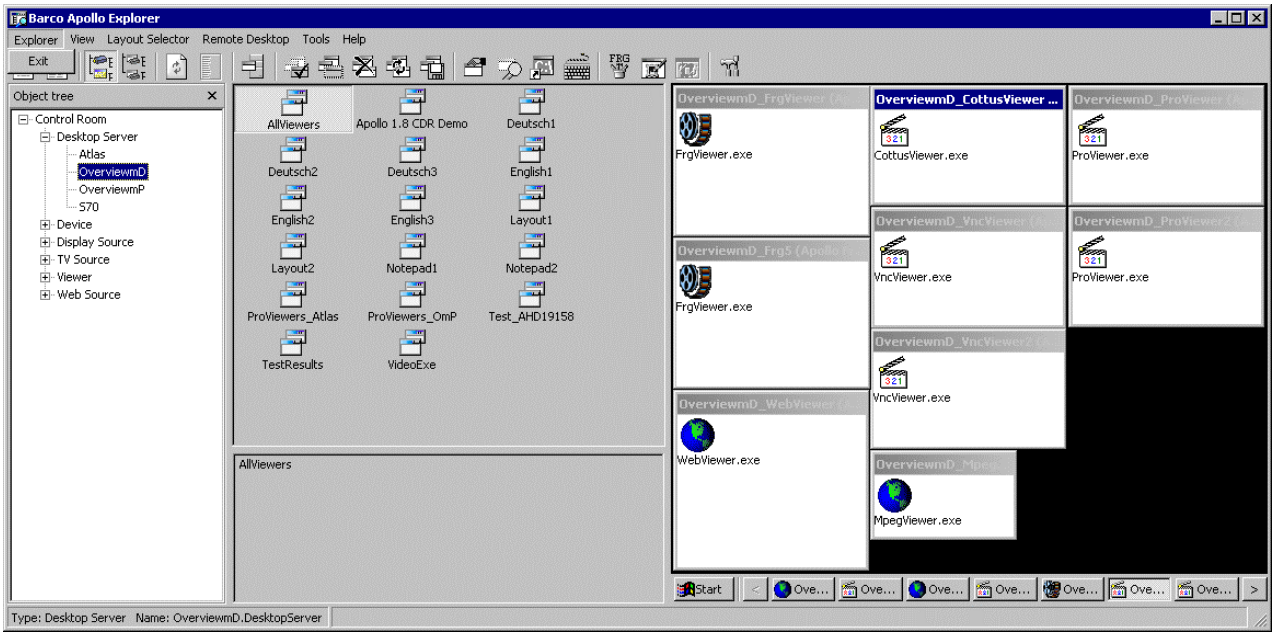
The context menu includes the Properties menu item used to open the Properties dialog box to control the objects.

7.6 Explorer menu bar

The Explorer menu bar includes the following items: Explorer, View, Remote Desktop, Layout Selector, Tools, and Help.

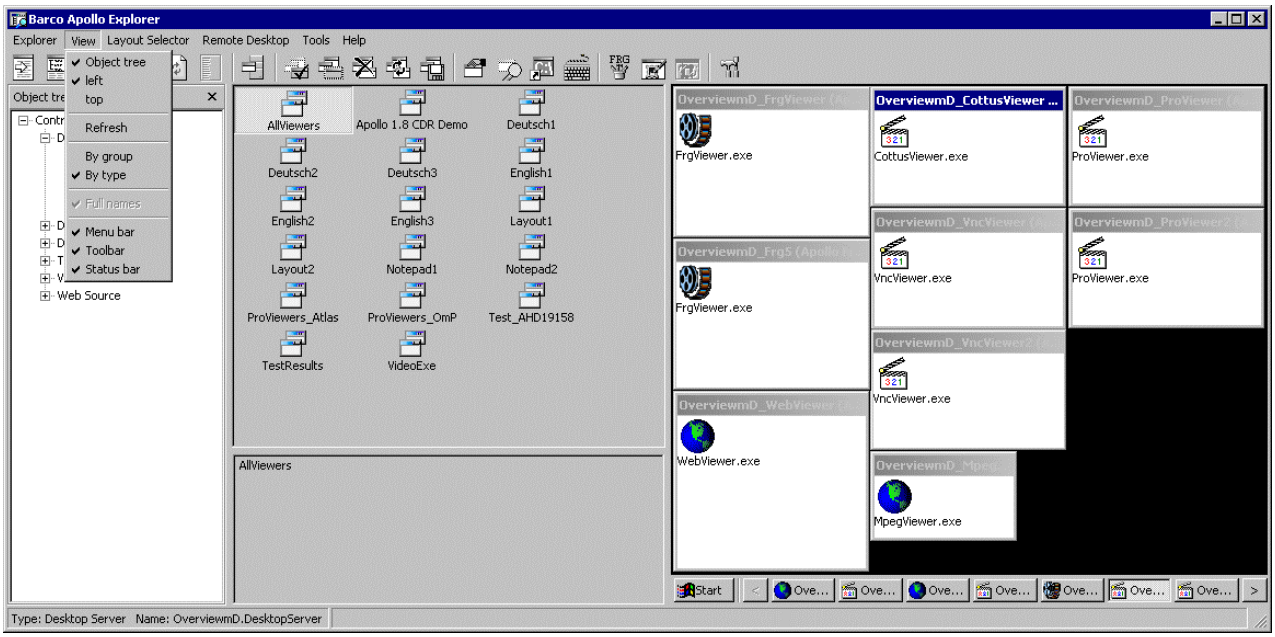
Menu items depend on the selected node in the object tree: The menu items Remote Desktop and Layout Selector are only available if the selected display wall is controlled by a Desktop Server.

7.6.1 Explorer menu



Select Exit to close the Apollo Explorer. Specified settings are saved and the Explorer opens with these settings next time it is launched.

7.6.2 View menu



Use this menu to select how and what the Explorer window shows. Related commands are grouped together: A checkmark before the menu item enables this item.

Object Tree: Checkmark set = object tree is shown; no checkmark = object tree is hidden

Left: Object tree position, only active if object tree is displayed. Results in a vertically split window: Object tree on left, workspace on right.

Top: Object tree position, only active if object tree is displayed. Results in a horizontally split window: Object tree on top, workspace on bottom.

Left/top are toggle commands if “Show object tree” has been enabled.

Refresh: Redraws the Explorer window. Corresponds with the button in the tool bar with the same name. Use this function, for example, to apply changes in the ServerData\viewersources.ini or in the ApolloExplorer.ini file to the object tree.

Sorted by Groups: Sorts the objects of the object tree by groups as defined in the configuration plan. A group always starts with the same name.

Sorting by Types: Sorts the objects of the object tree by types (classes), i.e., according to sources, devices, desktop servers, viewers, etc. as defined in the configuration plan.

View sorted by groups or types are toggle commands.

Full Names: Objects are displayed with the full name used to define the objects in the control room bus. Only the last characters (after the last dot/extensions) are displayed as names if this option is disabled.

Name	Typ
SCS.TestPool.BR1	LCD_DLP Projektor
HE.Testwall.H1	Hermes D2D
HE.Testwall.H2	Hermes V2A
HE.Testwall.M1	OverView-mP
HE.Testwall.M2	OverView-mP
SCS.Virtual.MP1	OverView-mP
SCS.Virtual.SW1	Matrix Switcher

Name	Typ
BR1	LCD_DLP Projektor
H1	Hermes D2D
H2	Hermes V2A
M1	OverView-mP
M2	OverView-mP
MP1	OverView-mP
SW1	Matrix Switcher

Menu Bar: Menu bar is shown if the checkmark is set.

The command to show the menu bar again is located in the context menu of the window's title bar. This context menu, opened by clicking with the right mouse button, offers not only the familiar Windows commands to manipulate the window but also the command to show the menu bar.

The command to hide the menu bar can also be reversed by editing the ApolloExplorer.ini file located in the user-specific folder.

Windows NT: ..../Winnt/profiles/user/Local Settings/Apollo/ApolloExplorer.ini

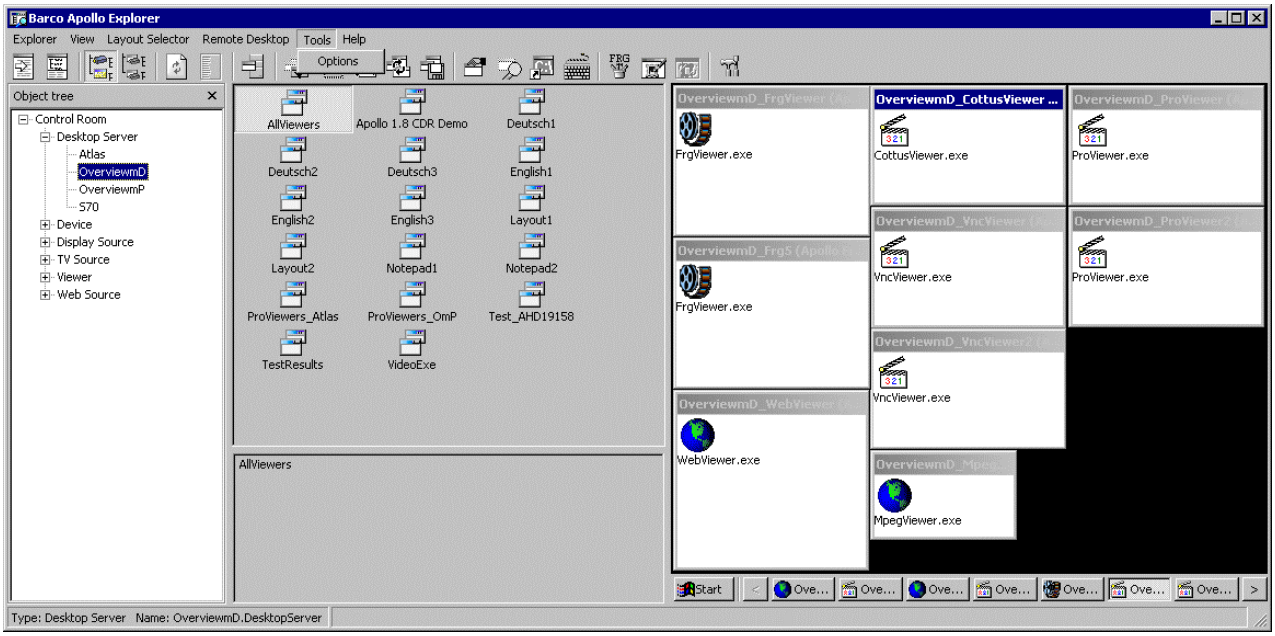
Windows 2000: .../Documents and Settings/User/Local Settings/Apollo/ApolloExplorer.ini.

Changes to this file are not applied if the Apollo Explorer is in use! Close the Explorer before editing this file!

Tool Bar: Checkmark set = tool bar is shown; no checkmark = tool bar is hidden

Status Bar: Checkmark set = status bar is shown; no checkmark = status bar is hidden

7.6.3 Tools menu

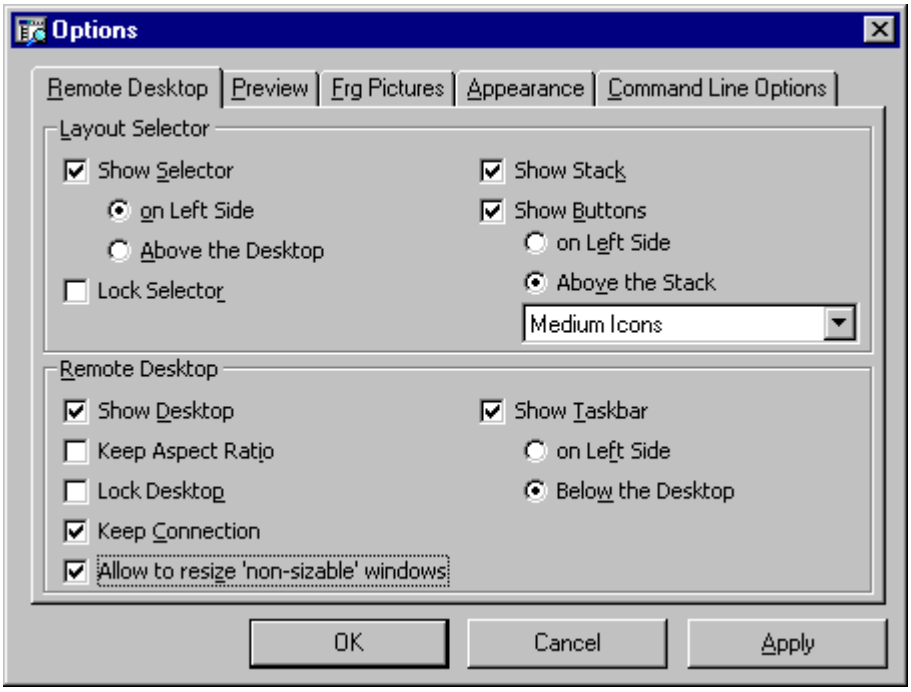


Menu item Options in the Tools menu opens a dialog box featuring five tabs used to customize the graphical workspace.

The commands on these tabs refer to the Remote Desktop and the Layout Selector, both of which are active only if the Display Wall has been selected in the object tree. Only then does the workspace show the graphical display.

However, the configuration of this graphical display can be customized regardless of the selection made in the object tree.

7.6.3.1 Remote Desktop tab



Layout Selector

All of the options are only selectable when the Layout Selector is displayed.

Choose Show Selector to display the Layout Selector in the workspace. The position of the Layout Selector in the workspace can be specified in reference to the Remote Desktop: Either on Left Side (workspace is split vertically) or Above the Desktop (workspace is split horizontally).

The Layout Selector covers the entire workspace if the Remote Desktop is not displayed.

Choose Show Stack to display all loaded layouts. These can be depicted either to the right of the available layouts (Show Buttons on Left Side) or below the available layouts (Show Buttons Above the Stack).

Use the list box to specify the icon size of the available layouts. Layouts can be listed only by name (without icon) as well.

Use the Lock Selector option to disable the Layout Selector functionality. Already loaded layouts cannot be unloaded and not yet loaded layouts cannot be loaded. The buttons of all layouts are then disabled as well.

Remote Desktop:

All of the options are only selectable when the Remote Desktop is displayed.

Select Show Desktop to display the Remote Desktop in the workspace. The Keep Aspect Ratio option has to be checked to show the display wall with the actual aspect ratio. This preserves the aspect ratio of the virtual desktop and matches the aspect ratio of the actual module configuration. The mini windows have the same aspect ratios as the display wall windows.

Use the Lock Desktop option to disable and lock the functionality of the Remote Desktop application as well. The mini windows can then no longer be manipulated and the Display Wall cannot be changed via the Remote Desktop. Changes carried out on the Display Wall continue to be shown.

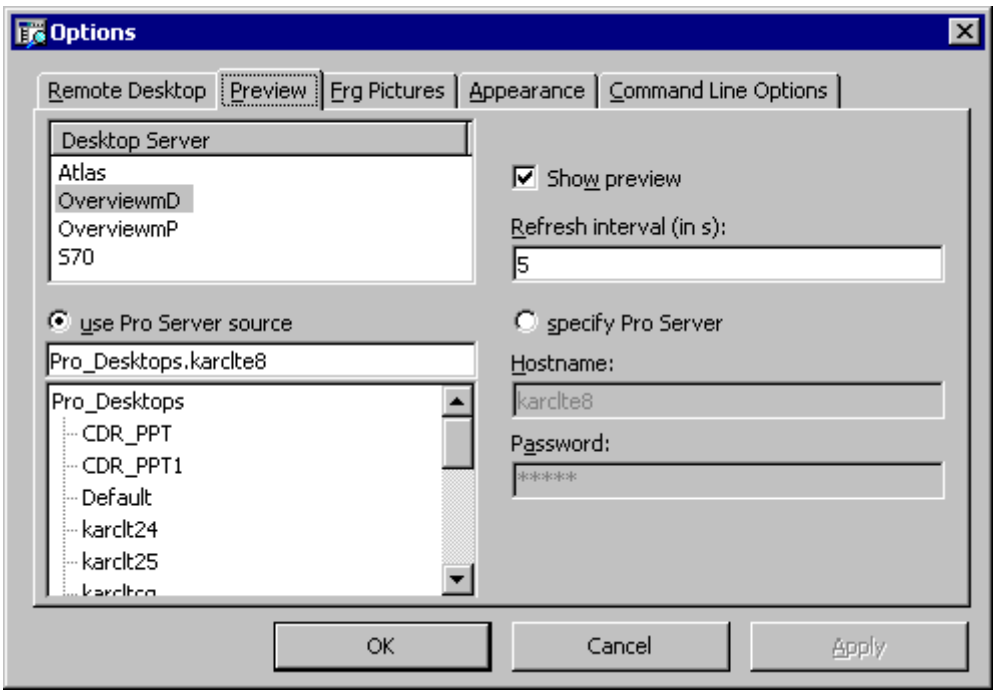
Select **Keep Connection** to maintain the link between Remote Desktop and Desktop Server even when clicking on device, for example, in the object tree, which deactivates the Remote Desktop and the Layout Editor.

If the **Keep Connection** option is not checked, the link is severed when switching to the a different node in the object tree and has to be reestablished by clicking on the Display Wall.

Starting with Apollo 1.9 there is an option **Allow to resize 'non-sizable' windows**. As default, this option is not selected. When ticked, the size of e.g. viewer windows which have no borders (and which therefore cannot be resized) can be modified.

The taskbar can be shown or hidden. If shown, you can select the position of the taskbar.

7.6.3.2 Preview tab



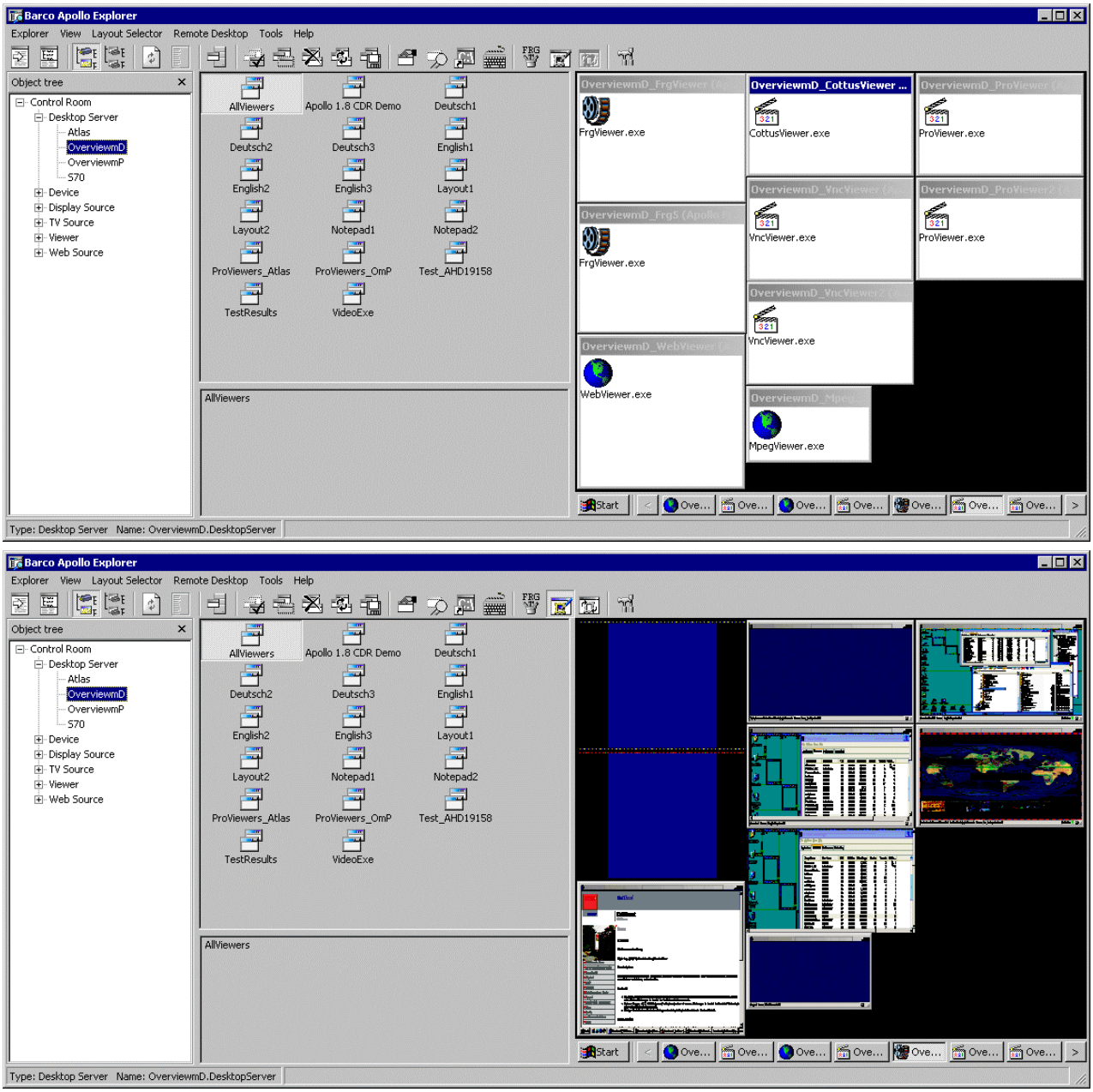
Starting with Apollo 1.8, the remote desktop offers to show content preview of the applications running on the display wall (also for viewers, except for the FRG viewer, for this viewer "content placeholders" can be defined, see below 7.6.3.3 Frg Pictures tab).

This functionality is built on the Pro Sever which has to be installed on the desktop server. Select it from one of the Pro Server sources defined in the viewersources.ini (**use Pro Server source**) or define it (**specify Pro Server**). Then the name of the host computer and the password has to be specified.

Check **Show preview** to see the content of the viewer in the mini window on the remote desktop. Define the **refresh interval** for updating the preview content.

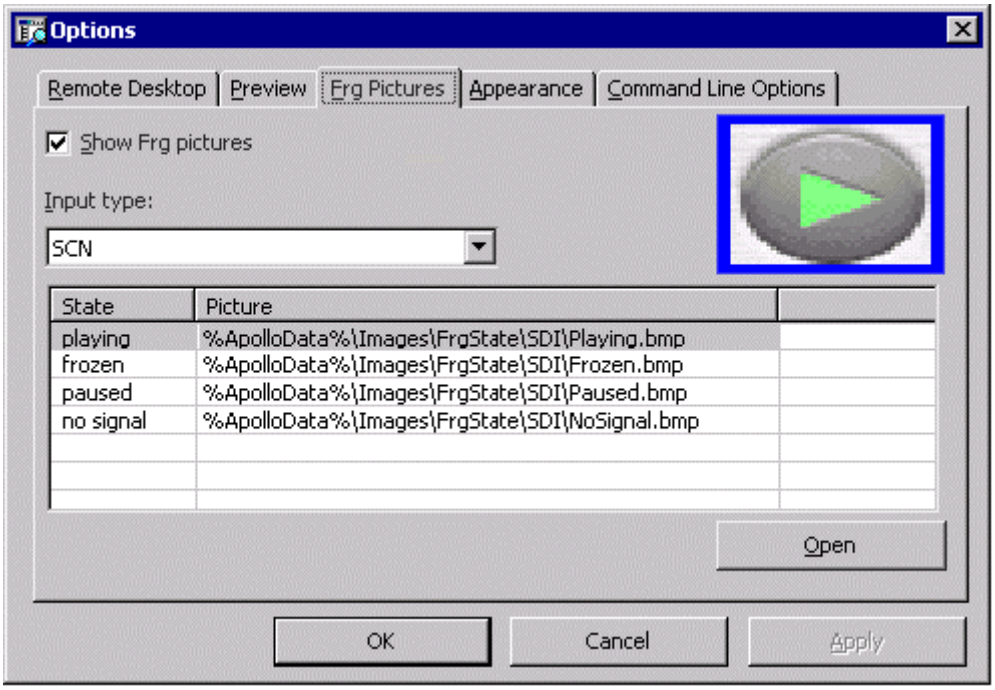
The following pictures show the appearance of the remote desktop in case preview is switched off (not selected) and switched on (selected), respectively.

Please note that for the FRG viewer windows no preview can be shown (blue window). To get information about the sources displayed via the FRG viewer, cf. 7.6.3.3 Frg Pictures tab



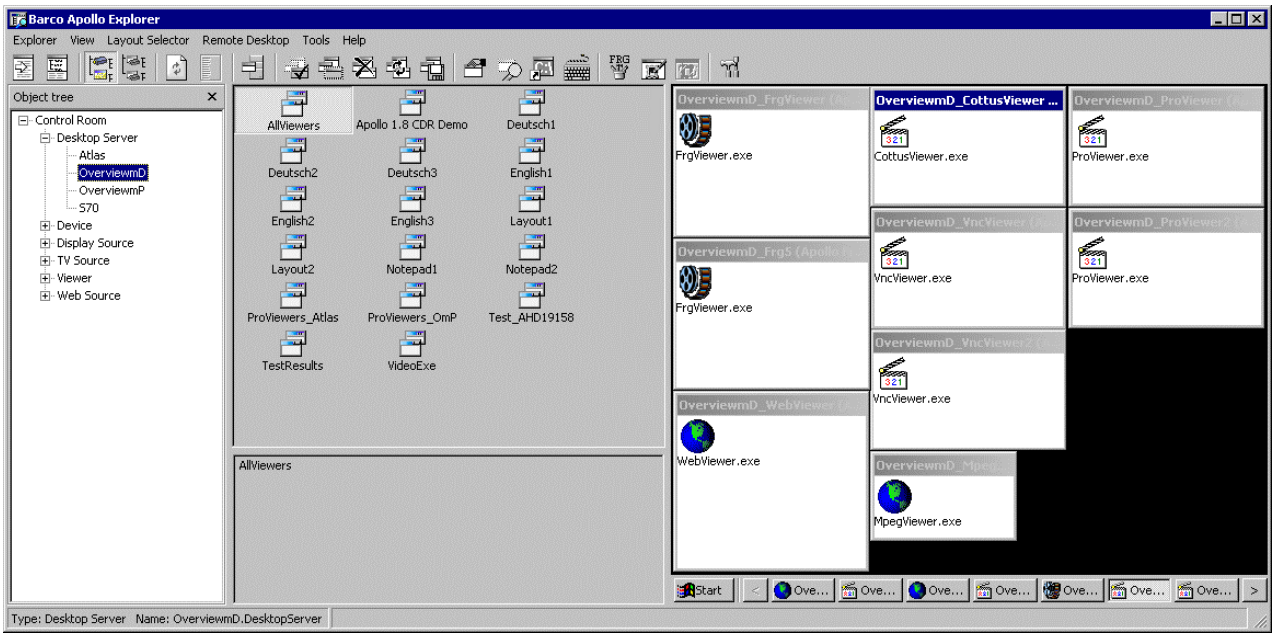
The content preview can also be switched on/off using the respective button on the toolbar.

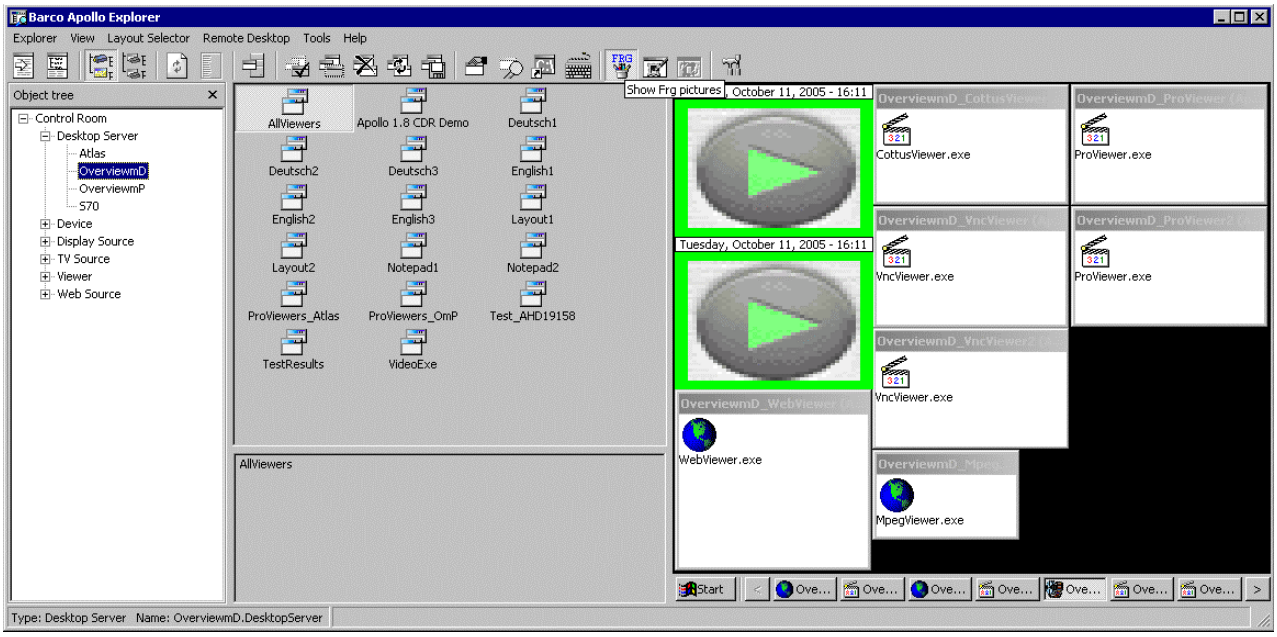
7.6.3.3 Frg Pictures tab



As already mentioned, it is not possible to show a preview of an FRG viewer window on the remote desktop. To get at least information about the source, the functionality **Show FRG Pictures** has been implemented. This functionality allows you to specify a bitmap for every state of the source (playing, frozen, paused, no signal). According the actual status of the source, the respective bitmap is shown on the representative of the viewer window on the remote desktop.

The following pictures show the remote desktop with **Show FRG Pictures** switched off (**Show FRG pictures** unselected) and switched on (**Show FRG pictures** selected)





Switching on and off the FRG pictures can be also done using the respective button on the toolbar.

When activating the FRG pictures, the windows also show a top banner: this is the entry of the **IDC1** (to be specified in the **Decoration** tab on the property page of the viewer.

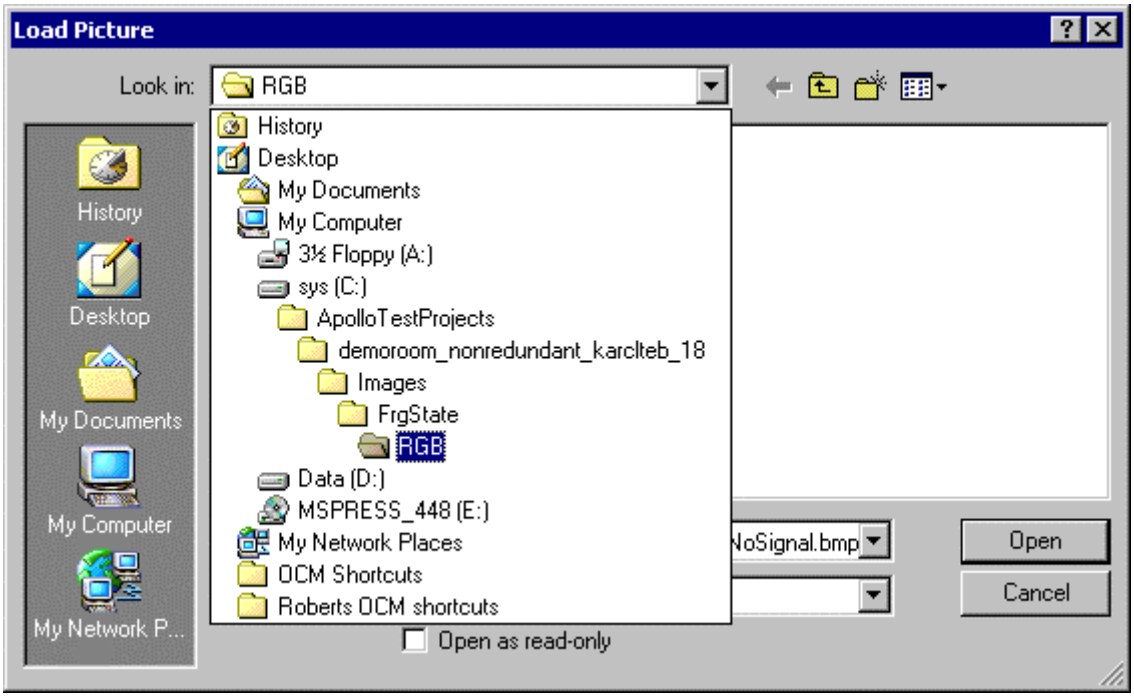
To remove the banner from the FRG viewer window in the remote desktop, it is not sufficient to disable IDC1.

In case you do not want a caption on these windows, enter an empty string as value for the IDC1!

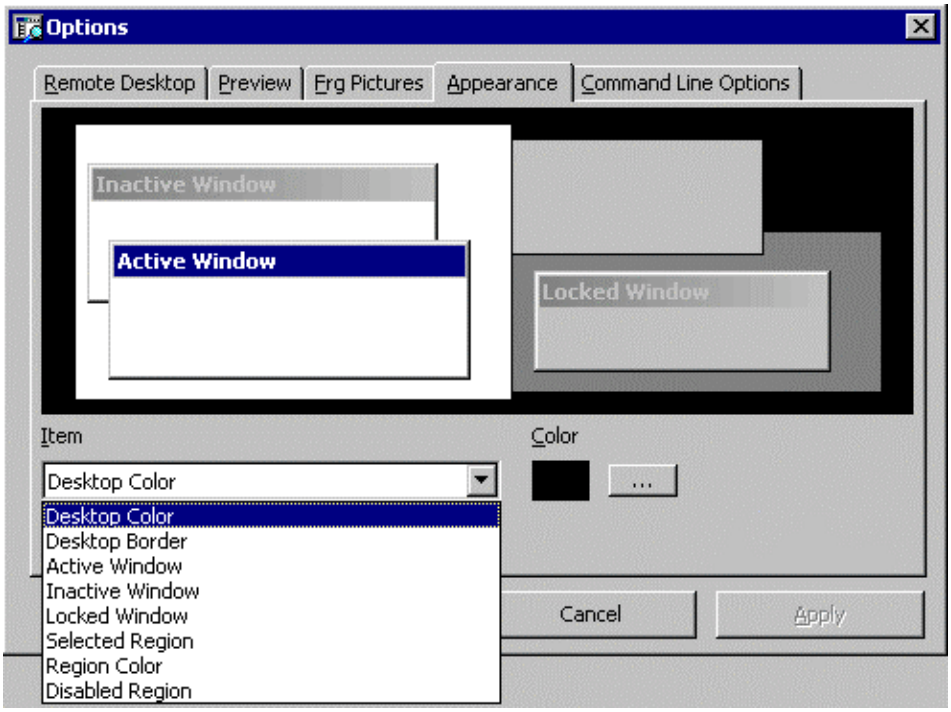
Any desired bitmap can be used to visualize the respective status of the viewer.

To replace the bitmap, first select the **input type** you want to define the bitmap for. The list box shows the entries for the Quad Analog Video Card, the Dual RGB Input card, the Quad SDI Video Card, the Streaming Video Card and the SCN.

Select one of the status. Click on **Open** (or double click on the entry) to open the folder where the bitmaps are stored. If desired, browse for a different bitmap.


Load Picture
Look in:
RGB
History
Desktop
My Documents
My Computer
3½ Floppy (A:)
sys (C:)
ApolloTestProjects
demoroom_nonredundant_karclteb_18
Images
FrgState
RGB
Data (D:)
MSPRESS_448 (E:)
My Network Places
OCM Shortcuts
Roberts OCM shortcuts
Open as read-only
NoSignal.bmp
Open
Cancel
History
Desktop
My Documents
My Computer
My Network P...

7.6.3.4 Appearance tab

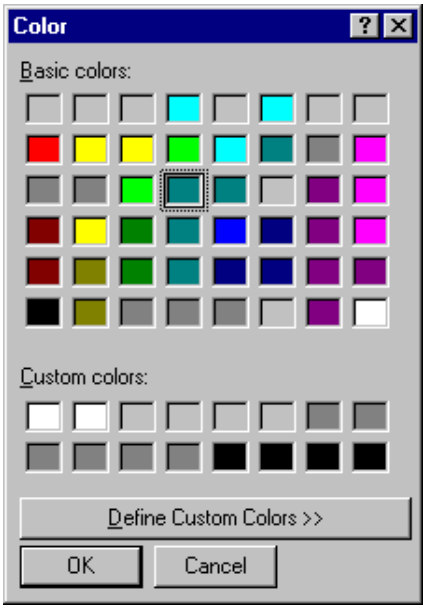


Use this tab to set the colors for the following elements:

- Desktop color
- Desktop border
- Active window
- Inactive window
- Locked window
- Selected region
- Region color
- Disabled region

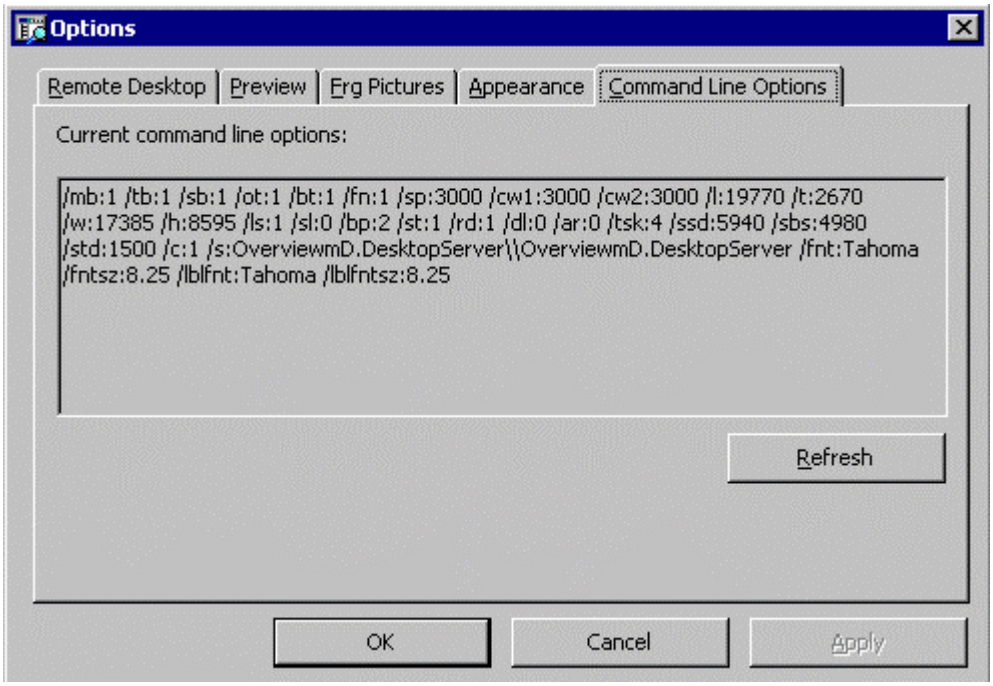
Select an element to be customized from the list box. The current color of the element is displayed.

Click on the button next to the displayed color to open the Windows standard color selection dialog box.



Select a color.

7.6.3.5 Command Line options tab



Use the Command Line Options tab to open the Explorer using a shortcut with the preset values for such functions as viewing settings. This requires assigning the corresponding parameters to the shortcut.

These parameters are listed in the following table.

The easiest way to pass the right parameter set to the shortcut is to customize the user interface of the Explorer as desired and then to update and highlight the entries on the Command Line Options tab. Use CTRL+C or the copy command from the context menu to copy these entries and then paste them into the Properties dialog box of the shortcut.

The Explorer's user interface can be customized as needed. For example, a screen similar to the former independent application Layout Selector can be specified by hiding the object tree and the Remote Desktop.

Cerate a shortcut incl. the corresponding command line options to launch an instance of the Explorer using this user interface.

The number of parameters definable for a Windows shortcut is limited.

The user-specific ApolloExplorer.ini file is NOT overwritten when launching an Explorer instance using a shortcut with an Ident parameter.

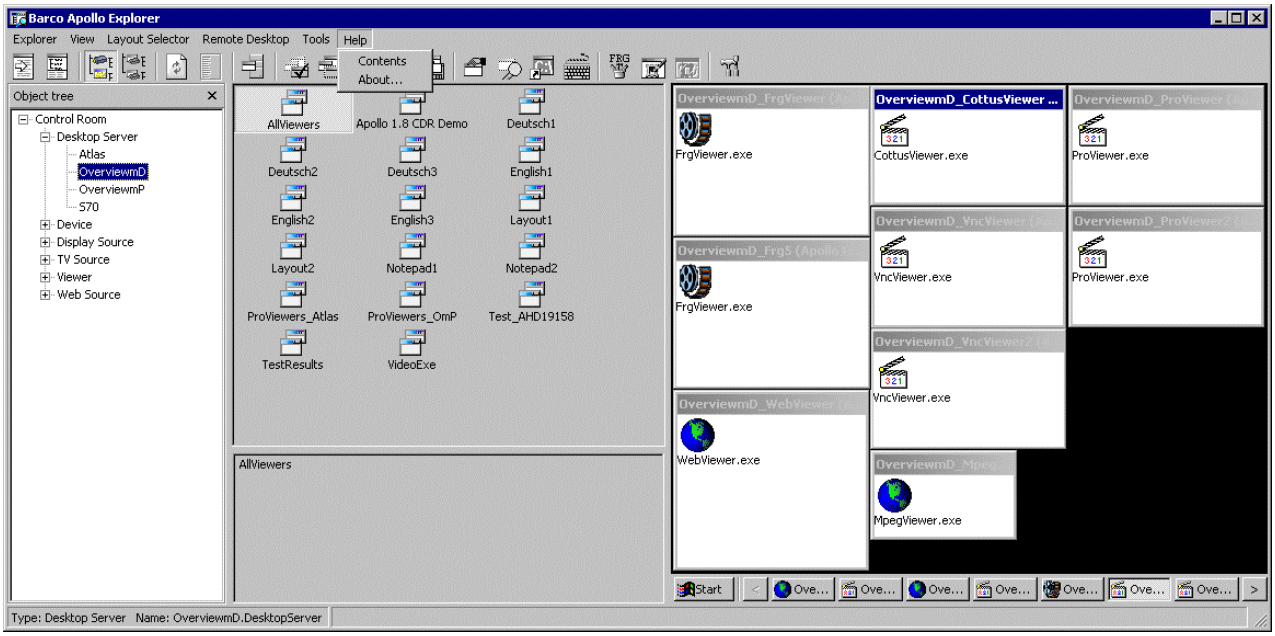
7.6.4 Valid Command line options

Syntax: ApolloExplorer.exe [/<option>:<value>][/<option>:<value>].

Option	Value	Meaning
/aspectratio, /asprat, /ar	0, 1	keep the aspect ratio of the remote desktop
/buttonpanel, /btnpnl, /bp	0, 1 (or left), 2 (or top)	hide layout button panel/show it on the left side/above the layout stack
/bytype, /bt	0, 1	view objects in the treeview by group/by type
/columnwidth1, /colw1, /cw1	<width>	width of the first column in the object list
/columnwidth2, /colw2, /cw2	<width>	width of the second column in the object list
/connection, /con, /c	0, 1	keep connection to the desktop server even if the remote desktop is not visible
/desktoplocked, /dsklock, /dl	0, 1	unlock/lock the remote desktop
/end		End the program
/fontname, /fnt	<font>	Set the main font
/fontsize, /fntsz	<size>	Set size of the main font
/fullnames, /fn	0, 1	show short/full names in the object list
/height, /h	<height>	height of the main window
/help, /?		Show command options
/ident, /id	<name>	Starts the Explorer assigning the specified name. If an Explorer with this name is already running, this instance is activated and the command options are sent to it. The second instance is closed.
/labelfontname, /lblfnt	<font>	Set the font for the labels
/labelfontsize, /lblfntsz	<size>	Set size of the font for the labels
/LayoutIconSize, /lis	0,1,2,3,4	0 no icons 1 small icons 2 medium icons 3 large icons 4 extra large icons
/layoutselector, /laysel, /ls	0, 1 (or left), 2 (or top)	hide the layout selector/show it on the left side/above the remote desktop
/left, /l	<left pos>	left coordinate of the main window
/menubar, /mb	0, 1	hide/show the menu bar
/objecttree, /ot	0, 1 (or left), 2 (or top)	hide the objecttree/show it on the left side/above the object list
/refresh, /r		refresh the object tree and object list

Option	Value	Meaning
/remotedesktop, /remdsk, /rd	0, 1	hide/show the remote desktop
/select, /sel, /s	<node>\\<item>	Select the node in the object tree and the item in the object list. Node and Item are separated by \\.
/selectorlocked, /sellock, /sl	0, 1	unlock/lock the layout selector
/splash, /spl		Shows the splash screen at startup of the Explorer.
/splitterbuttonsstack, /sbtnstk, /sbs	<position>	position of the splitter bar between layout button panel and the layout stack
/splitterposition, /splitpos, /sp	<position>	position of the splitter bar between the object tree and the object list
/splitterselectordesktop,/sseldsk, /ssd	<position>	position of the splitter bar between layout selector and the remote desktop
/splittertaskbardesktop, /stskbdsk, /std	<position>	position of the splitter bar between taskbar and the remote desktop
/stack, /st	0, 1	hide/show the layout stack
/statusbar, /sb	0, 1	hide/show the status
/taskbar, /tskbar, /tsk	0, 1 (or left), 4 (or bottom)	hide the taskbar/show it on the left side/below the remote desktop
/toolbar, /tb	0, 1	hide/show the toolbar
/top, /t	<top pos>	top coordinate of the main window
/width, /w	<width>	width of the main window

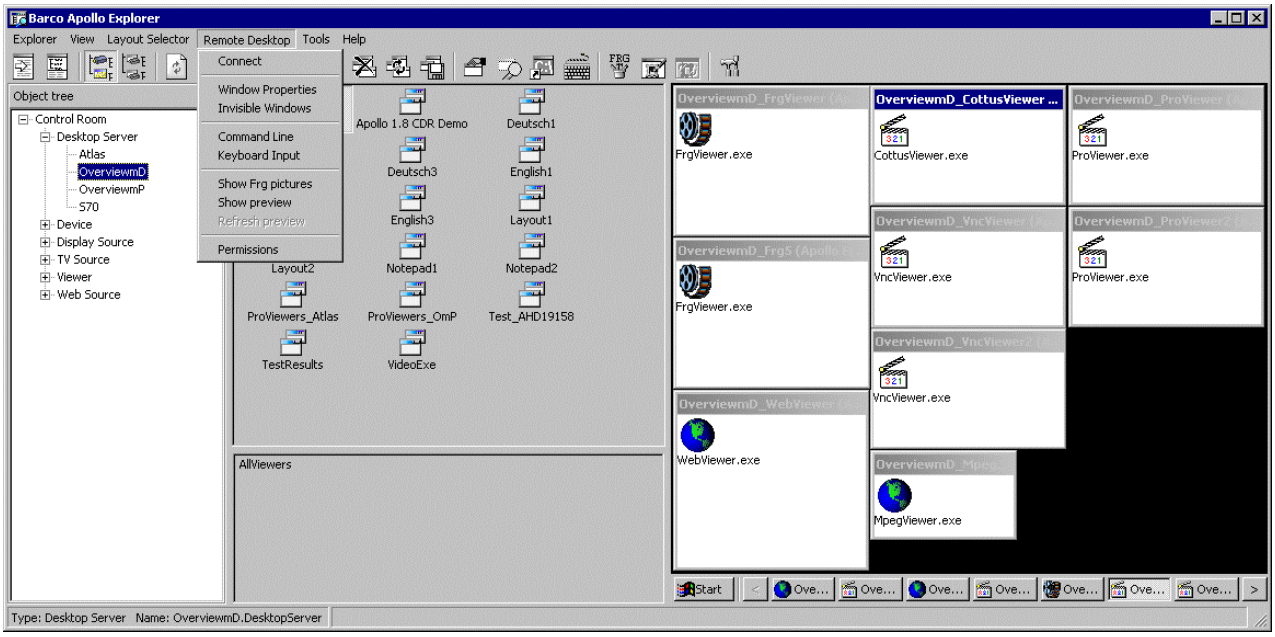
7.7 Help menu



The **Help** menu offers access to the table of contents of the online help.

About shows software version information.

7.8 Remote Desktop menu

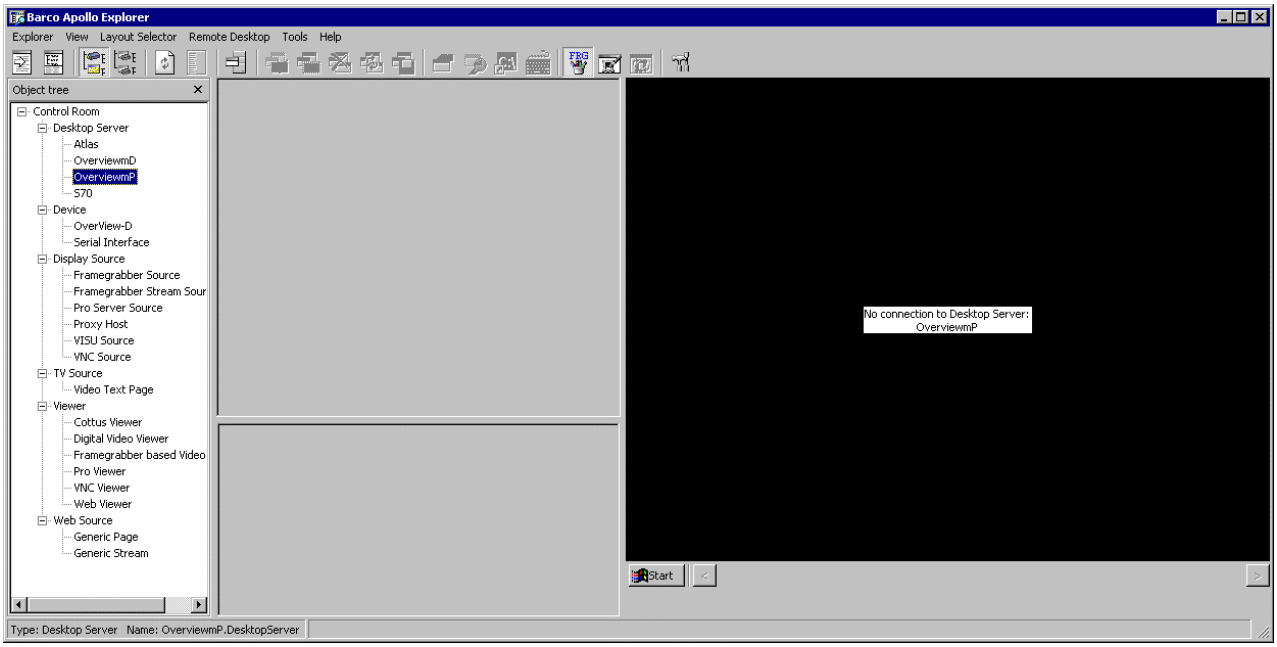


The component Remote Desktop is installed on every computer that is to have access to the windows of the Display Wall. Use this component to manipulate the windows of the Display Wall from a separate and remote workstation.

After the Desktop Server has been launched, it will first determine which windows are currently open. Title, position, and size of each window are determined. This information is dynamically updated.

The window information is passed to the Control Room Bus and therefore at once available for the Apollo Remote Desktop.

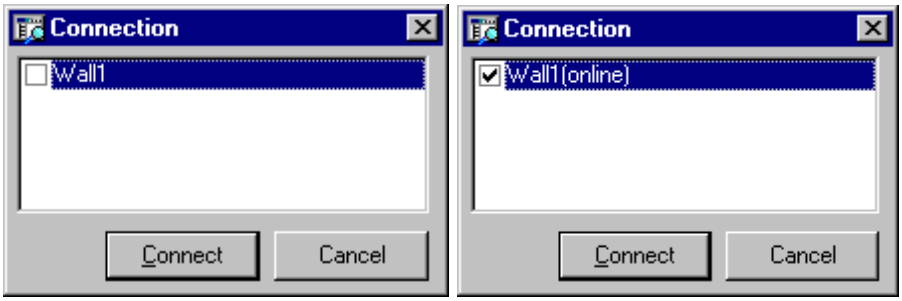
A missing link between the Remote Desktop and the Display Wall is indicated on the virtual desktop.



In order to control a Display Wall, a connection has to be established between the Remote Desktop and the Desktop Server.

7.8.1 Connect

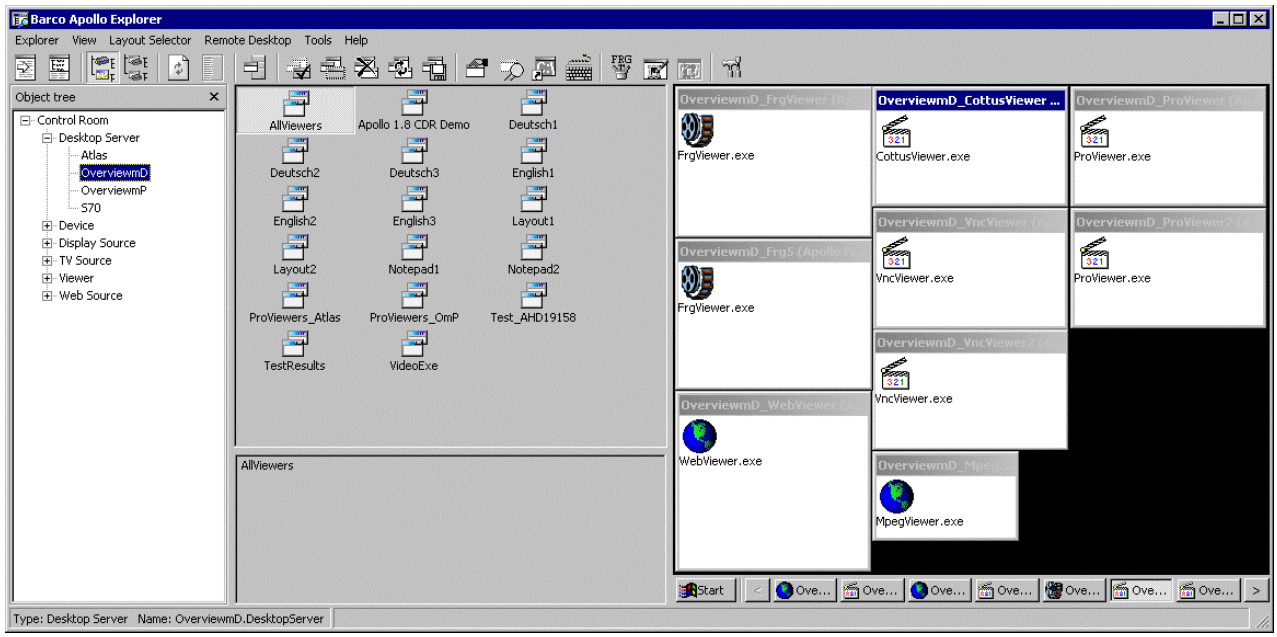
A dialog opens when selecting the **Connect** option in the **Remote Desktop** menu. All of the Display Walls that can be linked are listed here. **Online** indicates the Display Walls (**Desktop Servers**) which had already been launched and which can be connected at that point in time.



The window now shows on the left area the integrated **Layout Selector** with the region tabs (if regions are defined in the database), layout icons in the **layout area**, and the **layout stack**. The right shows the virtual desktop with its mini windows and the taskbar.

7.8.2 Virtual Desktop

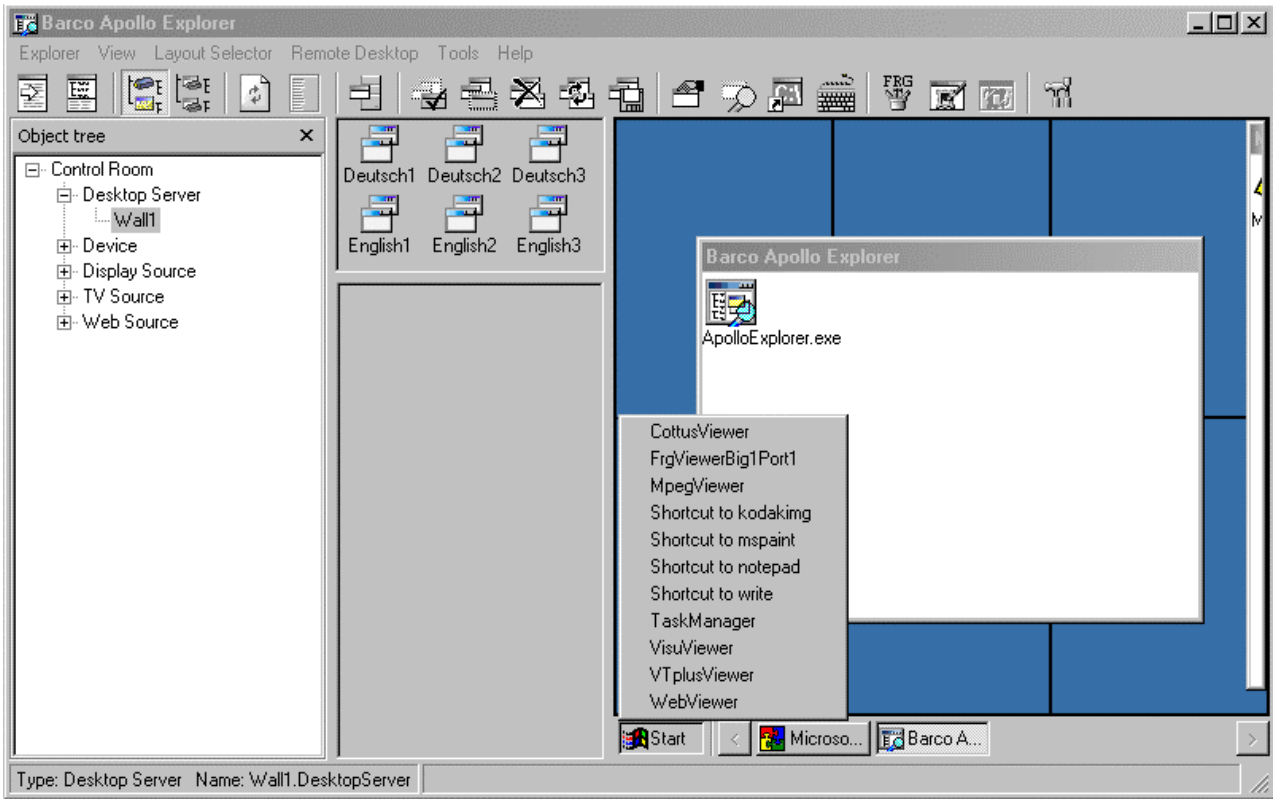
The **virtual desktop** shows a mini window for every visible window of the loaded layout. Depending on the permissions, the layouts of the Display Wall can be modified by means of the mini windows on the virtual desktop. The windows are also displayed as a button in a virtual taskbar.



The mini-windows on the desktop feature the properties defined for the windows of the layout loaded on the Display Wall. The title bar of the mini-windows, the contents of the windows, the buttons on the taskbar do also have a context menu. The title of the window or, if available, the description is displayed as tool tip. In addition the description will also be displayed in the client window.

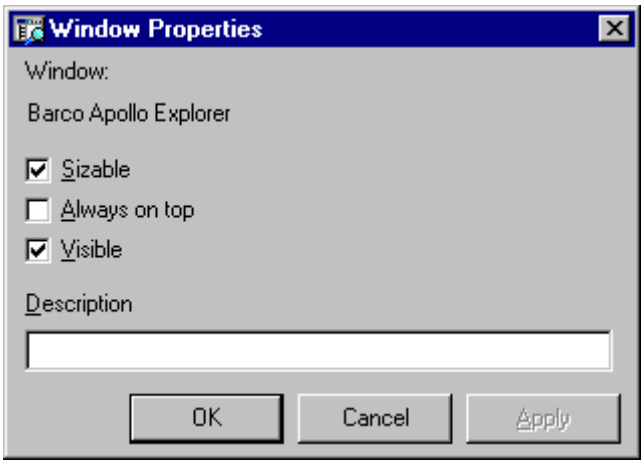
7.8.3 Task bar

Click on the Start button in the task bar to view all shortcuts which has been defined in the layout. To launch the desired application, just select it.



7.8.4 Window properties

A dialog opens to define the properties of the selected window in the layout.

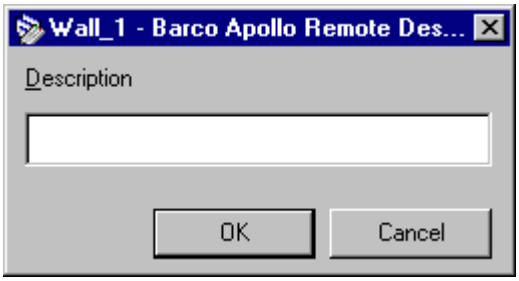


The **Always on top** option means that the selected window will always be displayed on top of all the others.

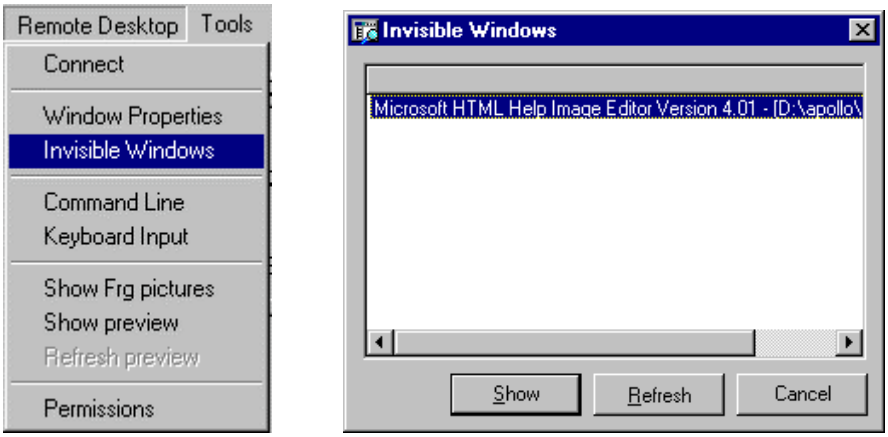
Sizable means that the size of the window can be changed using the mouse or the system menu. A window with a changeable size can snap to the grid with all four corners.

Use the **Visible** property to show or hide a window. A hidden window is not displayed in the taskbar either.

Enter a descriptive or explanatory text or commentary about the window into the description field. This text is displayed as tool tip and saved in the layout

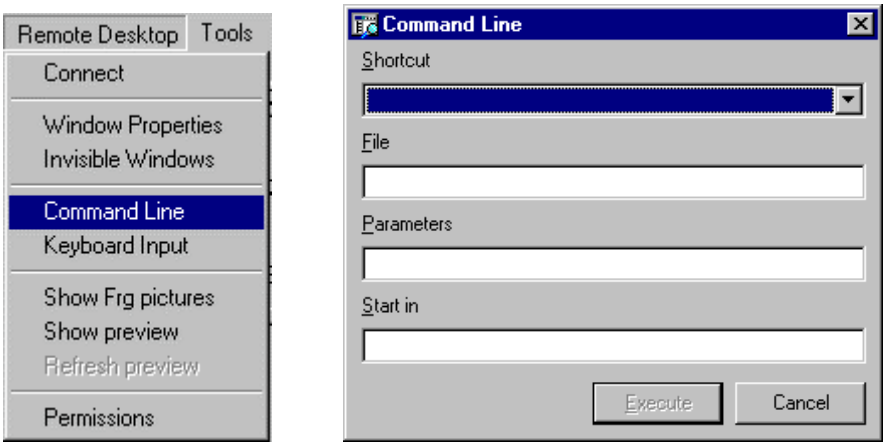


7.8.5 Invisible windows



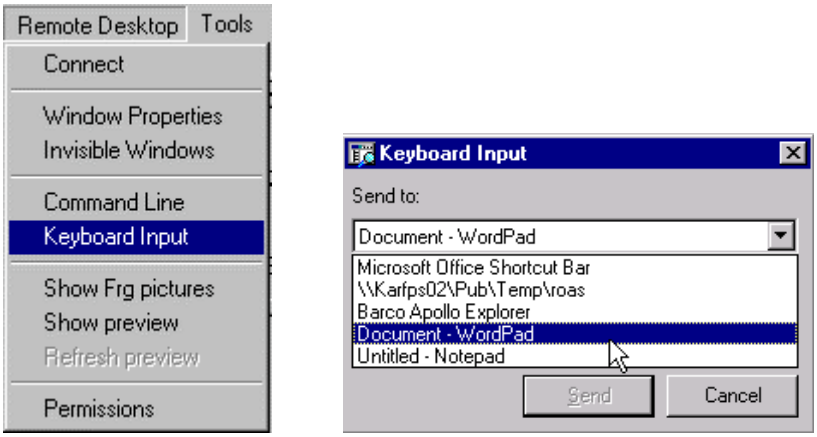
This displays a list of programs running in the background. Select the desired program and click on **Show** to move the program to the foreground.

7.8.6 Command line



Here, you enter the command for launching an application on the Display Wall. Select the shortcut of the program to be launched from the **Shortcut** list field or type it into the field. **File** contains the name of the document to be opened. The **Start in** field contains the directory where the program is to be started from. If any additional parameters are to be passed, enter these into the **Parameter** field.

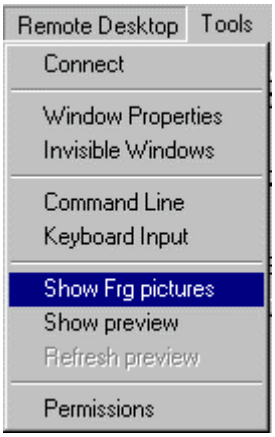
7.8.7 Keyboard input



Use an input dialog to send keyboard input to a window. This utilizes the same syntax as for the VB function SendKeys (see Commands via keyboard), i.e., special characters exist for special symbols and keyboard combinations.

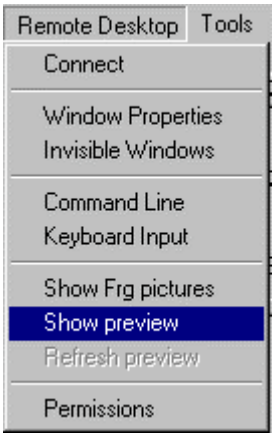
Select the target from the list box.

7.8.8 Show FRG pictures



This command displays/hides the bitmaps indicating the status of the source in the FRG viewer window on the remote desktop, cf. 7.6.3.3 Frg Pictures tab

7.8.9 Show preview

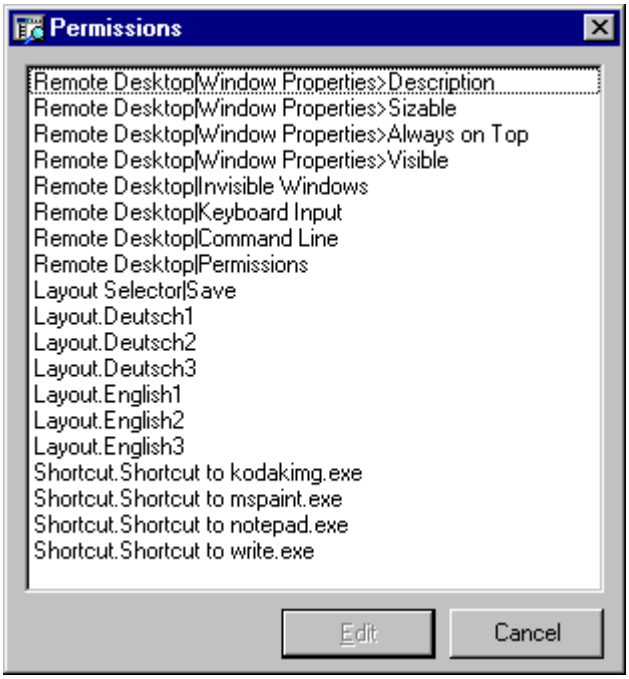


This command shows/hide a preview of the content of the applications and viewer windows in the representative on the remote desktop, cf. 7.6.3.2 Preview tab.

7.8.10 Refresh preview

This command triggers immediately the refresh of the preview content. The content is automatically updated according the refresh interval specified in the **Options** dialog, **Preview** tab, .cf. 7.6.3.2 Preview tab. Use this command to make sure that the preview shows the current content.

7.8.11 Permissions



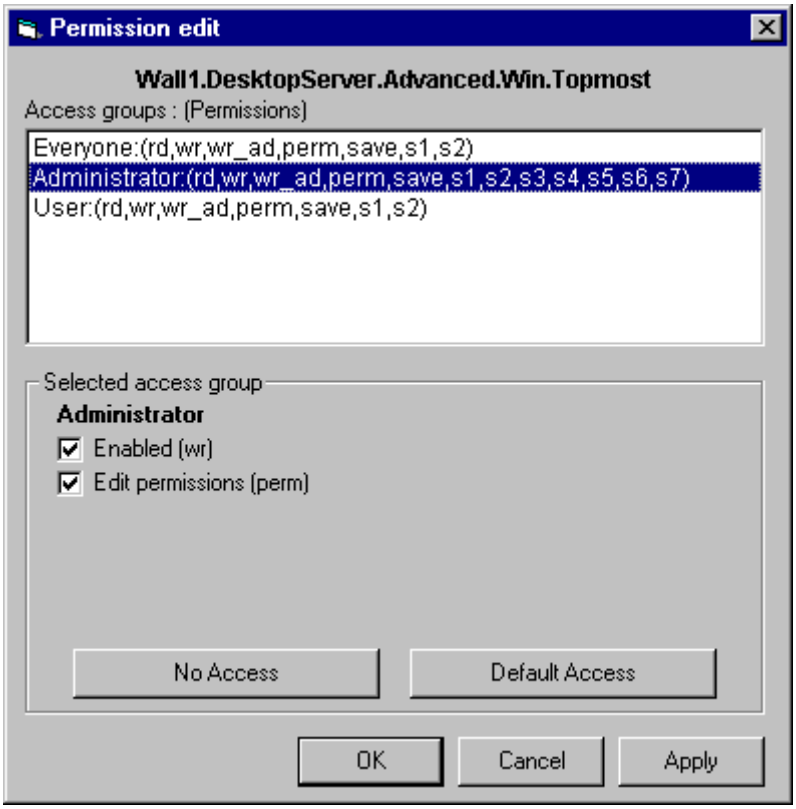
Use this command to edit the **permission** of the respective item. The **Permission** dialog pops up, in which all items are listed which have permissions assigned to: Menu items, regions, layouts, shortcuts.

Select the desired entry and click on **Edit**. The **Permission edit** dialogs is displayed. This dialog is also available via the context menu of the region tabs, layout buttons, and the region area in the virtual desktop.

Please refer to Permissions **to get information on the specific permissions of an item.**

7.8.12 Permission edit

Select the respective access user group to view which permissions are available and how they are given



Click on **No Access** to remove all permissions. Click on **Default Access** to assign the permissions as defined in the AccessGroups.ini file, cf. Defining accessGroups. Check or uncheck the respective item. Click **Apply** to assign the modifications to the access user group. Select **OK** to assign the modifications and to close the dialog. Press **Cancel** to close the dialog without any modifications.

The Permission Edit dialog also opens via the Permission command of the context menu (right mouse click) of the region tab, the layout icons, and the representatives of the region in the virtual desktop

7.8.13 Working with the Remote Desktop

It is recommended to define permanent layouts for the windows of the Display Wall. A layout is the arrangement of different windows on the entire desktop or in one or more regions on the Display Wall. Position and size is specified in a layout for each window and references to the upper left corner of the region.

If regions are defined, the position of a window is given relative to the upper left corner of this region.

If regions are defined, and if a region is selected, the virtual desktop shows the region, not the entire Display Wall. Please keept this in mind when arranging the windows of a layout – on the Display Wall, it might be necessary to shrink or overlap the windows to make them fit into the region

The name of each window is listed in the title bar. Layouts are easily defined with the **Layout Editor** and saved in the Apollo database.

The **Remote Desktop** does not access the Apollo Database but the **Control Room Bus**. The **Control Room Bus** has access to the Apollo database, in addition it receives updated information from the **Desktop Server** of the Display Wall or and passes updated information to the **Desktop Server**, respectively.

The following interactions require the appropriate permissions, e. g. it is not possible to click on a layout icon if these are invisible.

Establish a link with the Display Wall. Select the layouts to be loaded from the **layout bar**.

Activating or loading a layout rearranges any possibly already open windows or launches additional applications if their windows have yet to be detected.

Several layouts can be active simultaneously. These are then managed in a stack. If a window is associated with several layouts, its position and size is determined by the layout activated or loaded last, i.e., the uppermost layout.

If a layout is removed the windows of the remaining layouts are then rearranged.

You can resize, reposition, minimize, maximize, or close windows on the virtual desktop using the mini-windows on the virtual desktop. If regions are defined, repositioning of windows belonging to a layout can only be done within the respective region.

Use the usual mouse interaction on the virtual desktop for these manipulations.

To **Start** an application select **Edit|Command Line.** Enter the required parameters into the dialog., see Command line

Close the windows of an application to end the application using the usual mechanisms. Use the **Close** entry from the system menu or the corresponding entry of the context menu of the respective button in the taskbar (right mouse click).

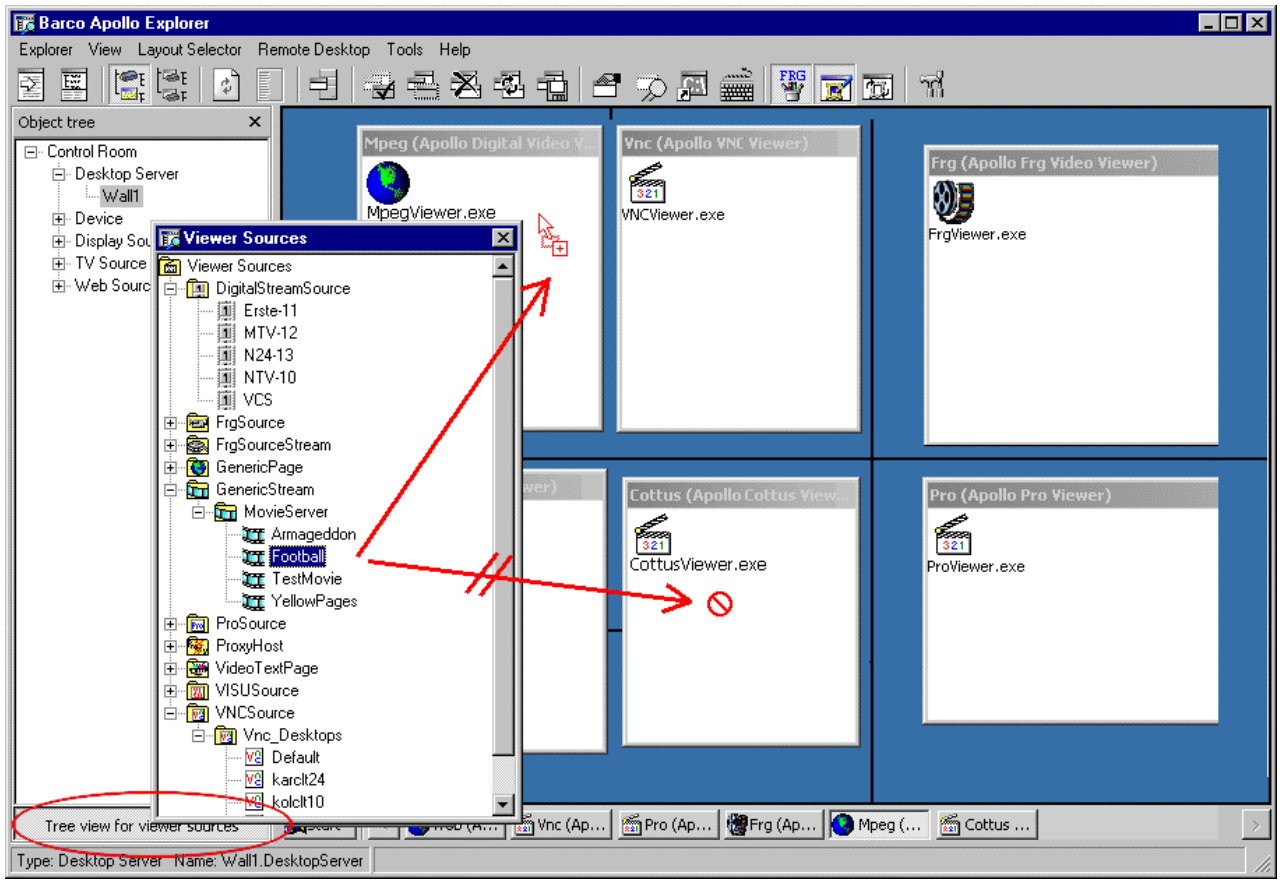
Closing the window of an application usually also terminates that application. Please note that some applications require user input with the help of a dialog when they are terminated (save, etc.). As long as you make sure that a window does not lose its focus, you can send keyboard input to a window. Select **Edit|Keyboard Input** to send input via keyboard to a window . Specify the characters you would like to pass to the window, see Commands via keyboard

To show a preview of the content of viewer windows, select **Remote Desktop|Show preview**. For the FRG viewer, no content preview can be shown, but the status of the source can be visualized using dedicated bitmaps. Select **Remote Desktop|Show FRG pictures** to display the status indication bitmaps.

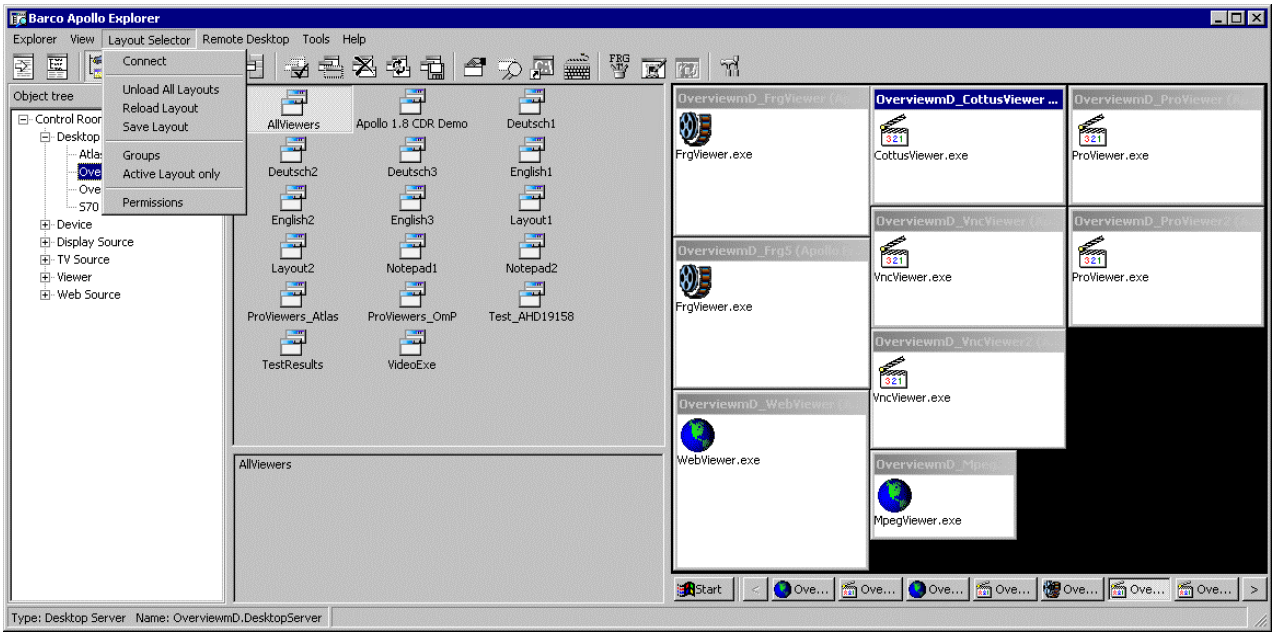
Starting with Apollo 1.9, a viewer can be connected to a viewer souce via drag and drop: If the button **Tree view for viewer sources** is pressed, a separate window opens showing a tree view which lists all the viewer sources defined and specified in the files **VieweerSources.ini** and **DigitalStreamSource.ini**.

Dropping a source node is only allowed if the mini window is an instance of an appropriate viewer tye, e.g. generic stream can only be dropped in a window of the Mpeg Viewer.

Dropping a generic stream e.g. into a window of the Cottus Viewer is rejected!


Barco Apollo Explorer
Explorer View Layout Selector Remote Desktop Tools Help
Object tree
Control Room
Desktop Server
Wall1
Device
Display Sou
TV Source
Web Sourc
Viewer Sources
Viewer Sources
DigitalStreamSource
Erste-11
MTV-12
N24-13
NTV-10
VCS
FrgSource
FrgSourceStream
GenericPage
GenericStream
MovieServer
Armageddon
Football
TestMovie
YellowPages
ProSource
ProxyHost
VideoTextPage
VISUSource
VNCSource
Vnc_Desktops
Default
karclt24
kolclt10
Tree view for viewer sources
Mpeg (Apollo Digital Video V...
MpegViewer.exe
Vnc (Apollo VNC Viewer)
VNCViewer.exe
Frg (Apollo Frg Video Viewer)
FrgViewer.exe
Cottus (Apollo Cottus View...
CottusViewer.exe
Pro (Apollo Pro Viewer)
ProViewer.exe
Vnc (Ap...
Pro (Ap...
Frg (Ap...
Mpeg (...
Cottus ...
Type: Desktop Server Name: Wall1.DesktopServer

7.9 Layout Selector menu



7.9.1 Layout Selector

Use the Layout Selector to easily load and remove layouts from a remotely linked Display Wall. Layouts have to be defined in the Layout Editor and saved in a database first.

After the Desktop Server has been launched, it will first determine which windows are currently open. Title, position, and size of each window are determined. This information is dynamically updated.

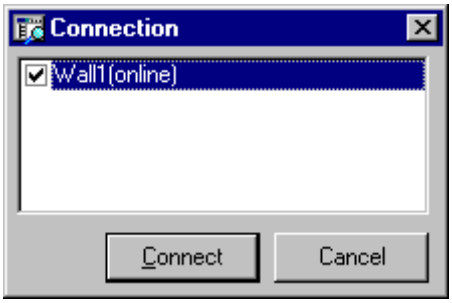
The window information is passed to the Control Room Bus and therefore at once available for the Apollo clients Layout Selector.

The changes made by the Layout Editor to the database connected to the Layout Selector, have effect at once due to the Control Room Bus communication.

Unload and reload the layout again to apply modifications made by the Layout Editor on a layout which is currently loaded.

7.9.2 Connect

Clicking on the connect menu item opens a dialog listing all Desktop Servers managed from the Control Room Bus. Select a Desktop Server to connect with. Online indicates that the respective Desktop Server has been launched. Starting and closing Desktop Servers result in adding or removing the online indication.



As soon as the Desktop Server has been launched, the connection is established and the layouts which can be loaded into this region are displayed with their respective icons.

When loading a layout, its name will be shown in the stack area.

7.9.3 Unload all layouts

Select Unload All Layouts to remove all loaded layouts. The unloaded layouts are removed from the layout stack, too.

7.9.4 Reload layouts

If a layout that has been manipulated on the Display Wall is to be reset to its original state select Reload. This command re-arranges the windows as defined in the layout.

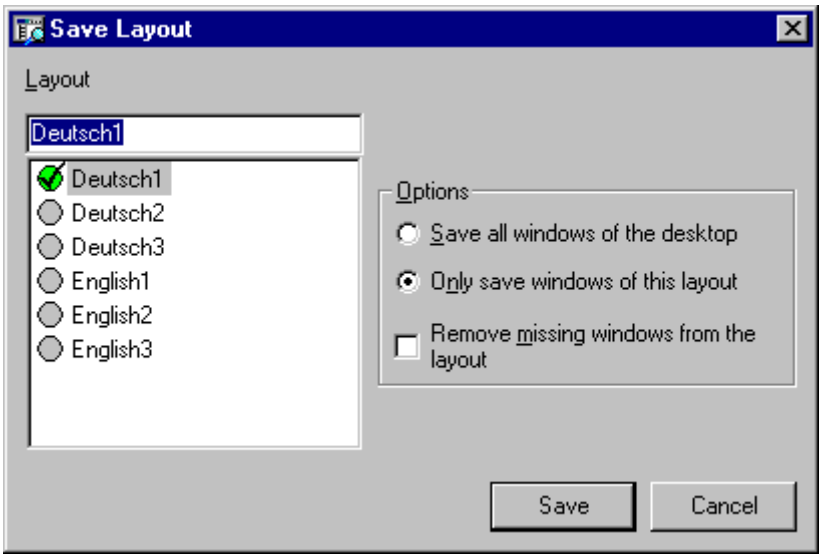
In this mode of operation the buttons of the loaded layouts appear released. Pressing the respective button then reloads the layout.

Reloading layout does not require to unload the layout. Windows are re-arranged according the definitions in the layout database without having to close applications first.

Changes made in the Layout Editor on a database of a Display Wall which is connected with the Layout Selector are immediately applied. However, new layouts or deleted layouts are only visible when re-starting the Layout Selector.

7.9.5 Save layouts

Changes made to the layout can also directly be saved in the unlocked (shared) database. A dialog opens where you can save the changed layout or define a new one. The current arrangement of windows can be saved, without requiring a loaded layout.



If a layout is loaded on the Display Wall, its name is suggested when saving.

You can save the layout with a new name and thus add it to the database.

When saving a layout with a new name, you can define if you want to save the windows of the respective layout only or additional windows (e.g. of another layout loaded) (Save all windows of the desktop; only save windows of the layout), or whether to remove closed (missing) windows from the layout (Remove missing windows from the layout).

A loaded layout is indicated by a ticked green bullet. In case there is no permission to save the layout (read only) , the layout is indicated by a red crossed bullet.

When entering a new name, only the option Save all windows of the desktop is available.

Layouts should only be saved under an existing name when this layout is loaded on the Display Wall.

The following properties of a window are saved:

	new window	window of the loaded layout
Title	Yes	Yes (unchanged)
Window class	Yes	Yes (unchanged)
Shortcut	No	Yes (unchanged)
Position	Yes	Yes
size	Yes	Yes
Window state	Yes	Yes*)
description	Yes	yes

If the title includes special characters, the layout has to be revised using the Layout Editor, see Identifying windows.

Use the Layout Editor to define the associated shortcut!

*)

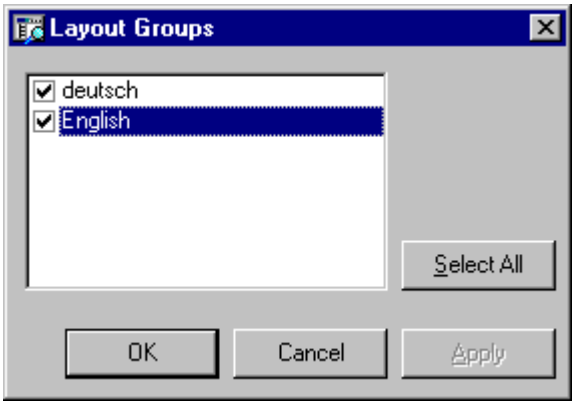
If a layout has been loaded with invisible windows (i.e. the respective applications have not been launched yet), and is then saved as a new layout, the then invisible windows will be saved with window state MINIMIZED regardless of the assigned window state. To assign the desired window state, use the LayoutEditor, please!

Invisible windows of a layout will always be saved with window state minimized!

If a layout is saved as a new layout, the advanced options Topmost, Sizable, Visible, Show title bar, will be explicitly set or cleared, even if these options in the original layout are grayed. These options will be set as the Desktop server “sees” them.

Any locked database has to be unlocked by the Desktop Server before changes can be saved. Unlock a database with Save and share Database in the Edit menu of the Layout Editor

7.9.6 Groups



Specify whether to show all layouts or only those that belong to a specific group. Group association is specified in the Layout Editor. Select the corresponding group in the Select Layout Group menu to display only layouts of this group. The menu entries list all groups defined in the In Layout Editor. It is possible to select multiple groups

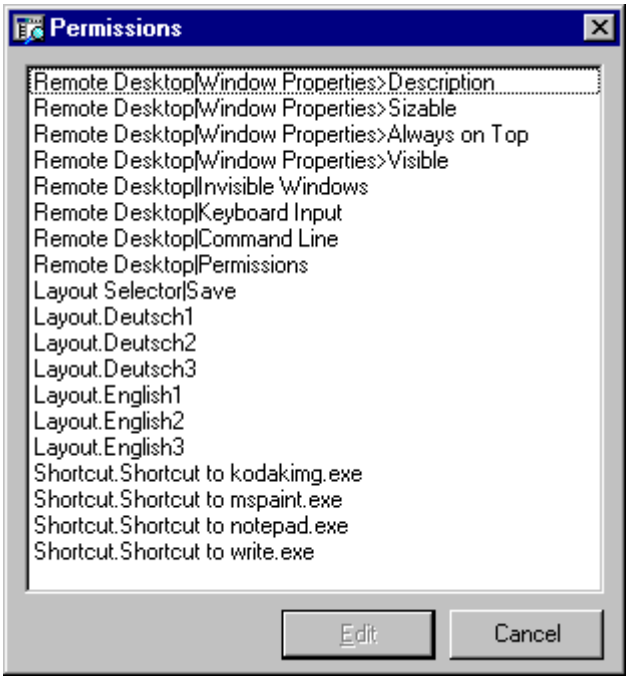
This menu shows a list of all groups as defined in the Layout Editor. If groups are added or removed, the entries are dynamically updated by the Control Room Bus.

7.9.7 Active layout only

The last loaded layout can be displayed with the help of the menu button Show active layout only. In this mode all other layouts are unloaded and removed from the layout stack and therefore displayed depressed. The button of the active layout is displayed as pressed.

In this mode of operation, loading a layout removes all other layouts.

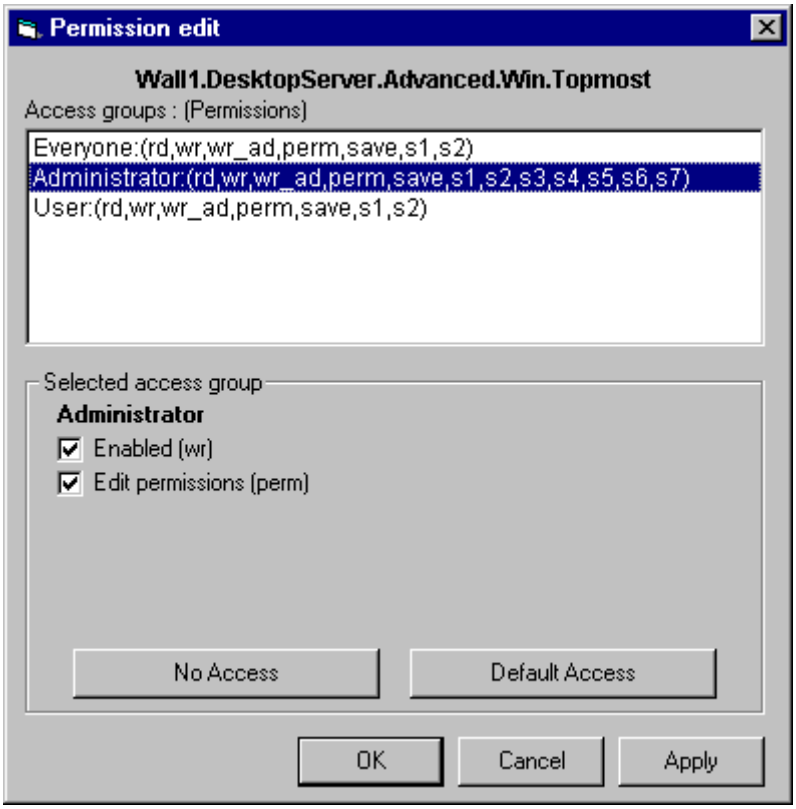
7.9.8 Permissions



Use this command to edit the permission of the respective item. The Permissions dialog pops up, in which all items are listed which have permissions assigned to: Menu items, regions, layouts, shortcuts.

Select the desired entry and click on Edit. The Permission edit dialogs is displayed. This dialog is also available via the context menu of the region tabs, layout buttons, and the region area in the virtual desktop.

Please refer to Permissions to get information on the specific permissions of an item.



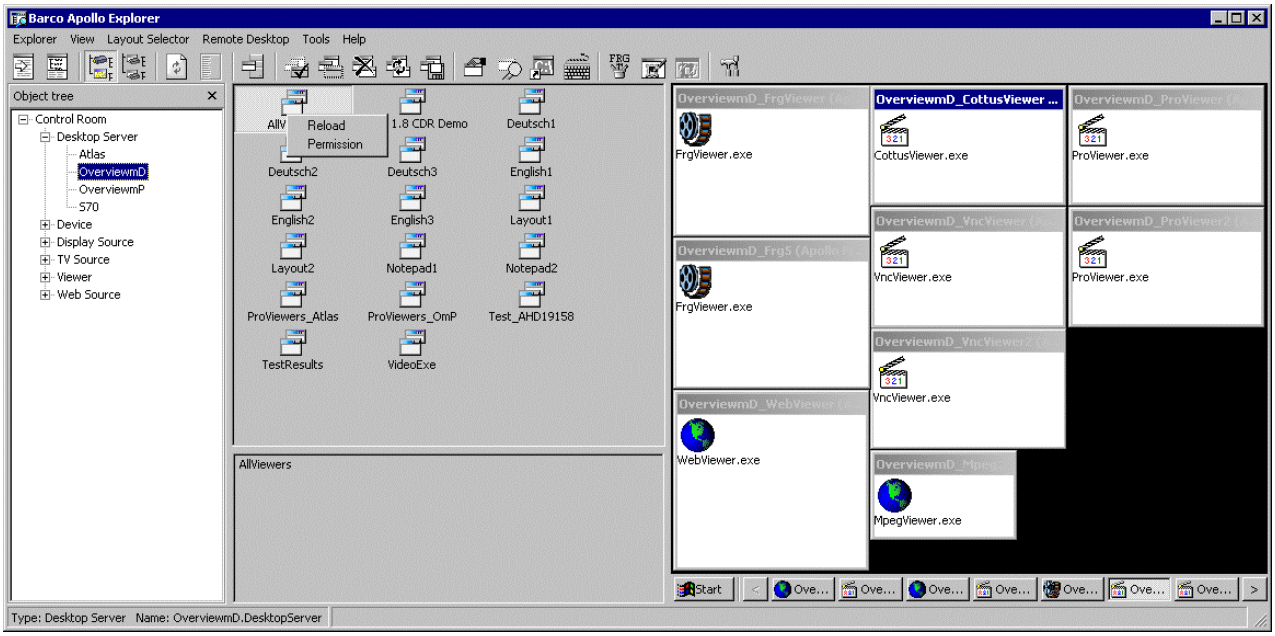
Select the user group to show the specific permissions assigned to the objects.

Click on No Access to remove all permissions. Click on Default Access to assign the permissions as defined in the AccessGroups.ini file, cf. Defining accessGroups. Check or uncheck the respective item. Click Apply to assign the modifications to the access user group. Select OK to assign the modifications and to close the dialog. Press Cancel to close the dialog without any modifications.

The Permission Edit dialog also opens via the Permission command of the context menu (right mouse click) of the region tab, the layout icons, and the representatives of the region in the virtual desktop

7.9.9 Context menus

Right mouse click on the region tabs or on the layout icon displays the context menu.



Click on Reload to re-arrange the windows of the respective layout according their defined layout.

Click on Permission to view and define the permissions for the defined access user groups.

Please see the respective chapters of the menu items of the Layout Selector menu (Reload Layout, Permissions).

7.10 Explorer tool bar

Just like the menu bar, the tool bar of the Explorer is also dependent on the selected object tree node. The number of buttons depends on whether the Display Wall is selected in the object tree, which means the Remote Desktop and the Layout Selector are active.

Tool Tips shows which function is assigned to the buttons.

The following table lists which buttons are associated with which menu item. Additional information is listed with the corresponding menu entries.

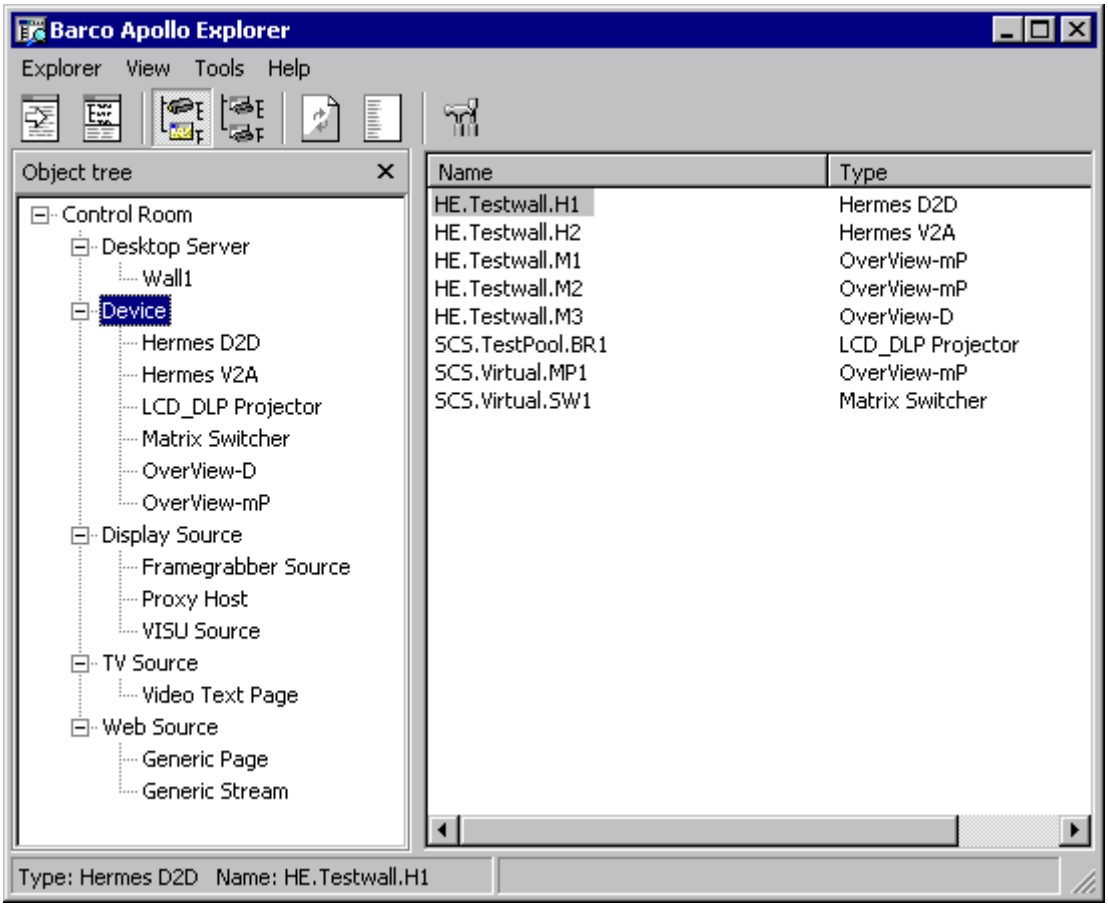
Symbol	Description	Note
	Hide object tree	Cf. View menu
	Top; Toggle button, changes button to On left side when clicked	Cf. View menu
	Sorting by Types:	Cf. View menu
	Sorting by Groups:	Cf. View menu
	Redraw	Cf. View menu
	Complete names	Cf. View menu
	Link with Desktop Server	Cf. Remote Desktop, Layout Selector menu
	Only active layout	Cf. Layout Selector menu
	Layout groups	Cf. Layout Selector menu
	Remove all layouts	Cf. Layout Selector menu
	Reload layout	Cf. Layout Selector menu
	Save layout	Cf. Layout Selector menu
	Window properties	Cf. Remote Desktop menu
	Hidden windows	Cf. Remote Desktop menu
	Command line	Cf. Remote Desktop menu
	Keyboard input	Cf. Remote Desktop menu
	Show FRG pictures	Cf. Tools|Options
	Show preview	Cf. Tools|Options
	Refresh preview	Cf. Tools|Options
	Options	Correspond to Options menu item in the Tools menu

7.11 Device Manager in the Explorer

Selecting the node Desktop Server|Display Wall of the object tree, the menu bar and the tool bars are completed by the menu items and the functions of Remote Desktop and the Layout Selector. The entire functionalities of the previous stand-alone applications are integrated in the Apollo Explorer.

In addition the object tree also gives access to the functionality of the Device Manager by selecting the node Device. This node explodes to the tree view known from the previous stand-alone application Device Manager.

It is recommended to view th objects sorted by groups.



Click on the name of the device in the workspace to open the dialog for controlling the device.

Compared to the stand-alone application, the integrated Device Manager offers an enhanced functionality resulting from customizing the context menu. It is e.g. possible by defining the respective command for multiple selections to switch on all projectors simultaneously, cf. Context menus

Devices are controlled with the Simple Network Management Protocol (SNMP). The Apollo SNMP Manager is the interface between the Control Room Bus and the Simple Network Management Protocol (SNMP) and makes it possible to integrate an SNMP-compatible device using a configuration file. Device-specific properties, parameters, and commands are assigned to the elements of the control room database.

The SNMP Manager runs on the computer that holds the control room database.

The devices supported by Apollo 1.5are all controlled via the Barco RC Agent.

To make use of the Device Manager, the SNMP agents first have to be installed! They are provided on the Apollo CD-ROM. With each Apollo Release, the required RC agent is provided. In case there is already an RC Agent installed on your system,check its version, and upgrade if it's different from the one supplied on the Apollo CD-ROM.

The object tree shows all devices available in the Apollo Project.

However, it is not possible to change the configuration or to remove/add devices from the Apollo project.

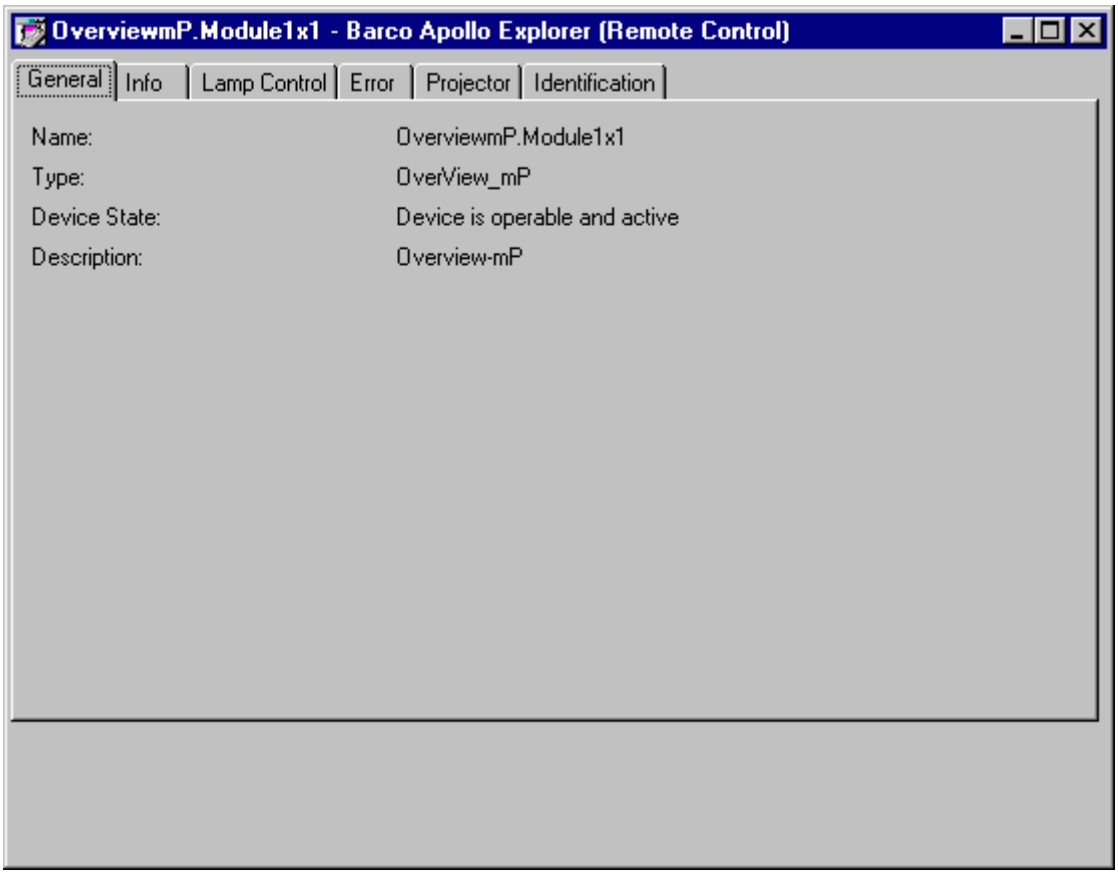
The workspace area shows the names of all devices. Double click on the name of a device to open its property dialog box or select it using the context menu.

Besides showing static information about device type, serial number, firmware version, software version, and the current status of the device; device-specific settings can be changed by means of the property dialog box.

The following sections explain the property dialog box of all devices supported by Apollo.

7.11.1 OverView-mP50

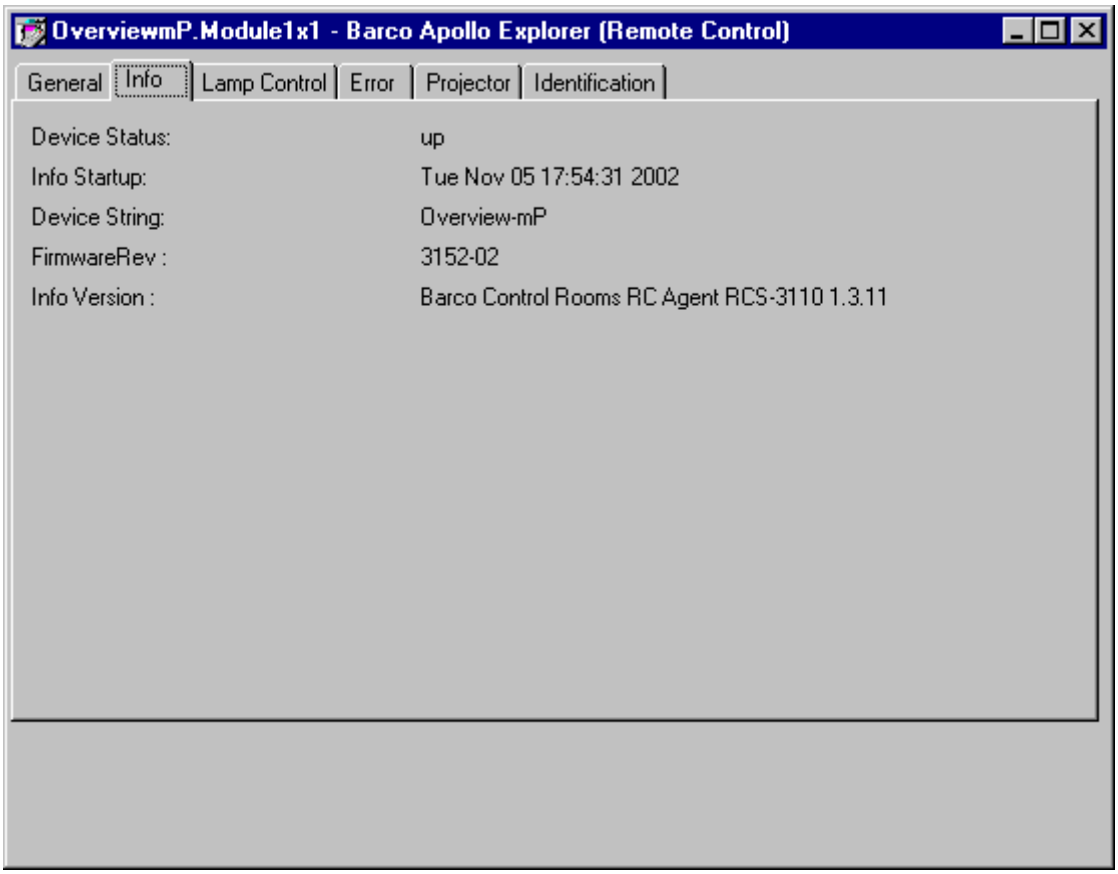
7.11.1.1 General



On this tab general information about the device are listed.

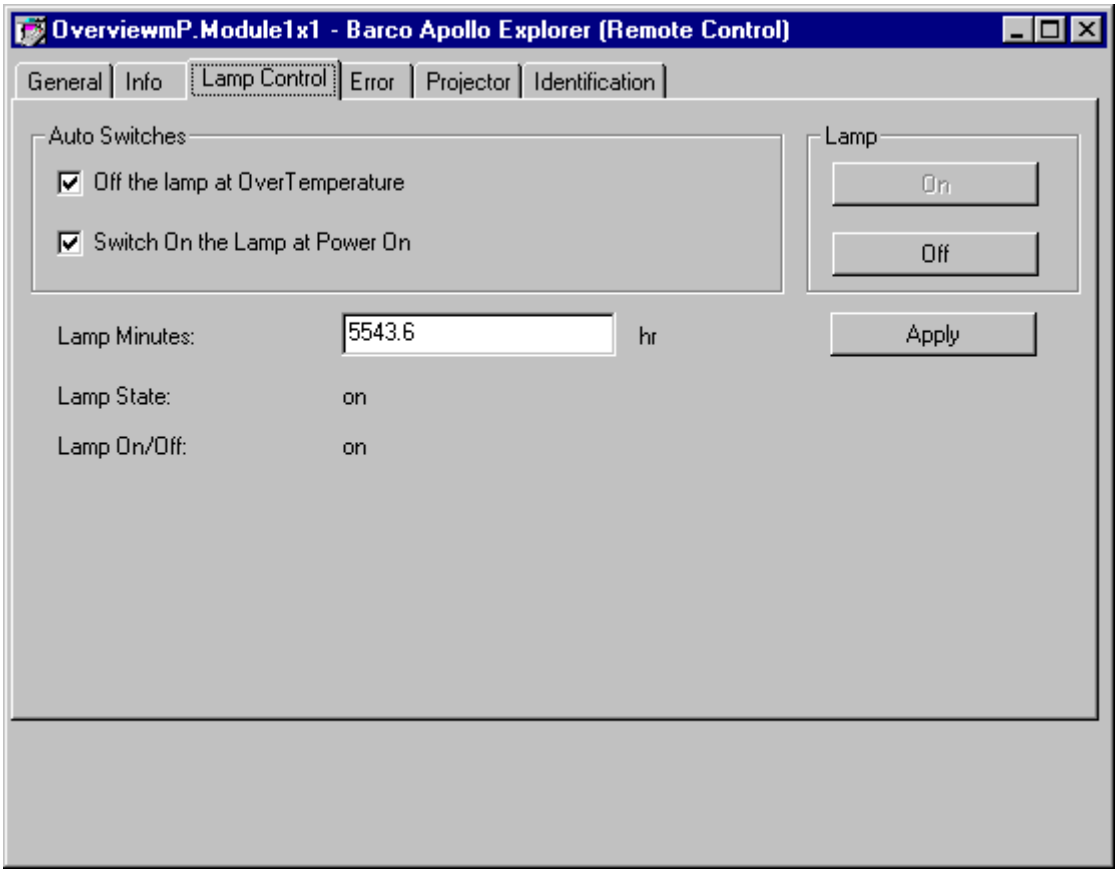
Name	Assigned by Control Room Configurator
Type	The rear projection systems OverView-mP50 and AtlasC4 incorporate the identical projection engine (OverView-mP)
Device State	Gives information if the device can be addressed by the SNMP Agent
Description	Displays the designation for the type of module entered into the Control Room Configurator

7.11.1.2 Info



Device Status	Informs about the current operating state of the device
Info Startup	Informs when the SNMP Agent has been launched
Device String	Passes the internal device info about the type of projection module (OverView-mP50, Atlas67C4)
FirmwareRev	Indicates the Firmware revision
Info Version	Informs about the SNMP Agent (type and version)

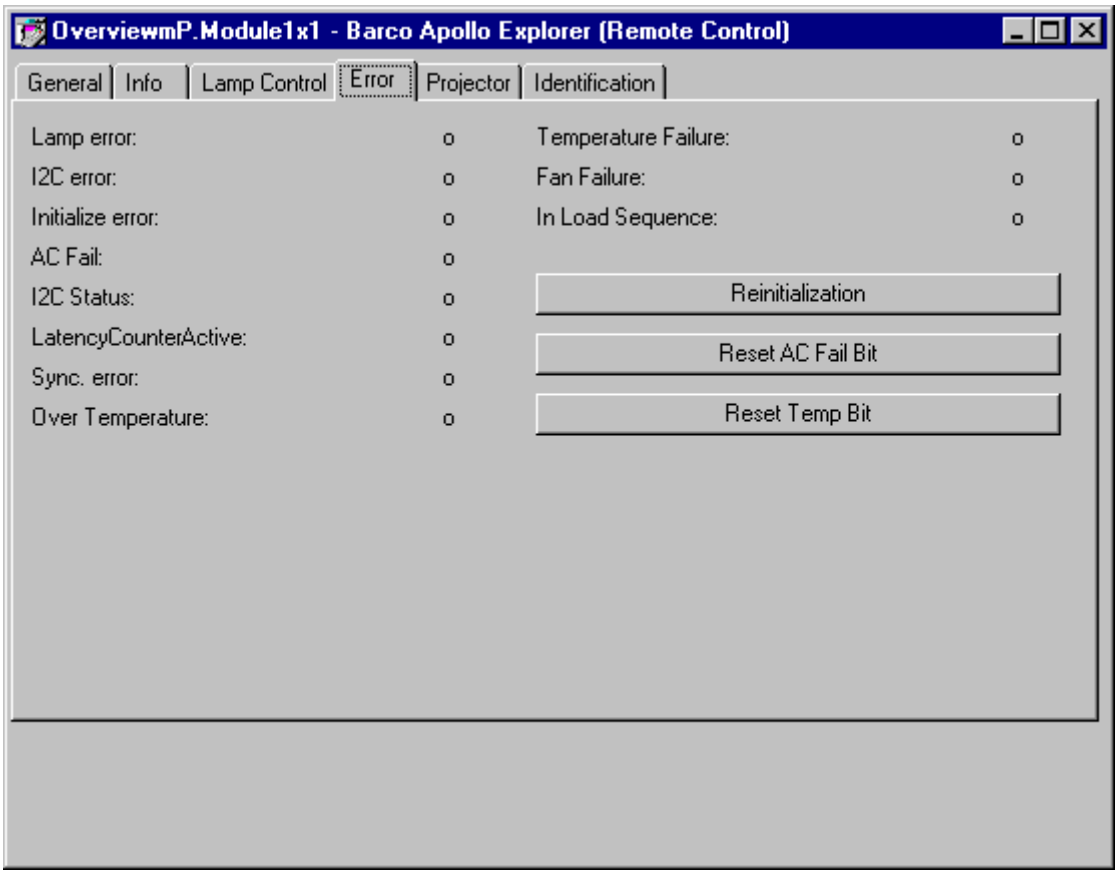
7.11.1.3 Lamp Control



Auto Switches	Use these switches to specify whether a lamp is to be automatically turned off when reaching a specific temperature and whether the lamp is automatically switched on once voltage is supplied.
Lamp	Toggle between switching lamp on and off. The **ON** button is only active if the lamp is off. The same applies to the **OFF** button. Displays the service life of the lamp. This value can be edited after the lamp has been replaced.
Lamp Minutes	Displays the operating time of the lamp. Only edit this value after the lamp has been replaced! Click **Apply** to enter the new value.
Lamp State	Informs about lamp state
Lamp On/Off	Informs about the proper lamp state. In normal operation mode this information should match the value of **Lamp State**.

Only edit the operating time when replacing a lamp!

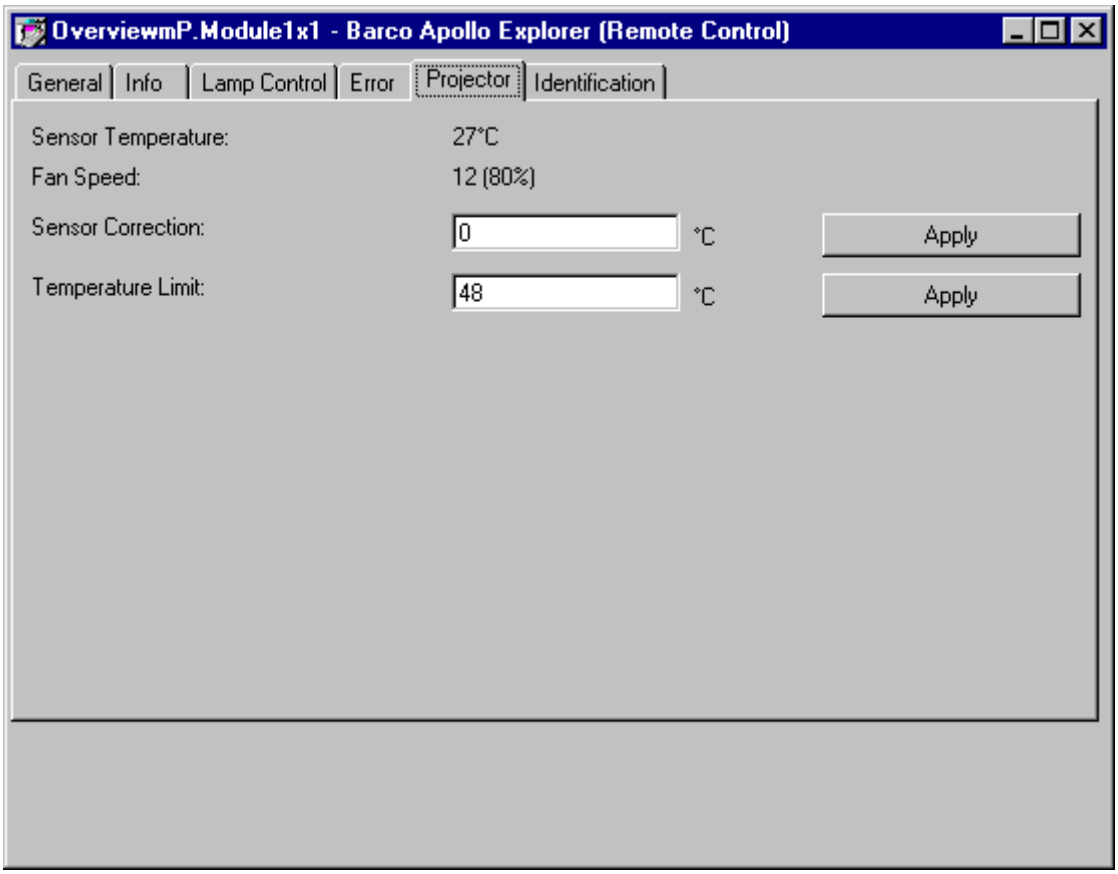
7.11.1.4 Error



This tab informs about occurrence and kind of error. An error which has taken place is indicated by a tick.

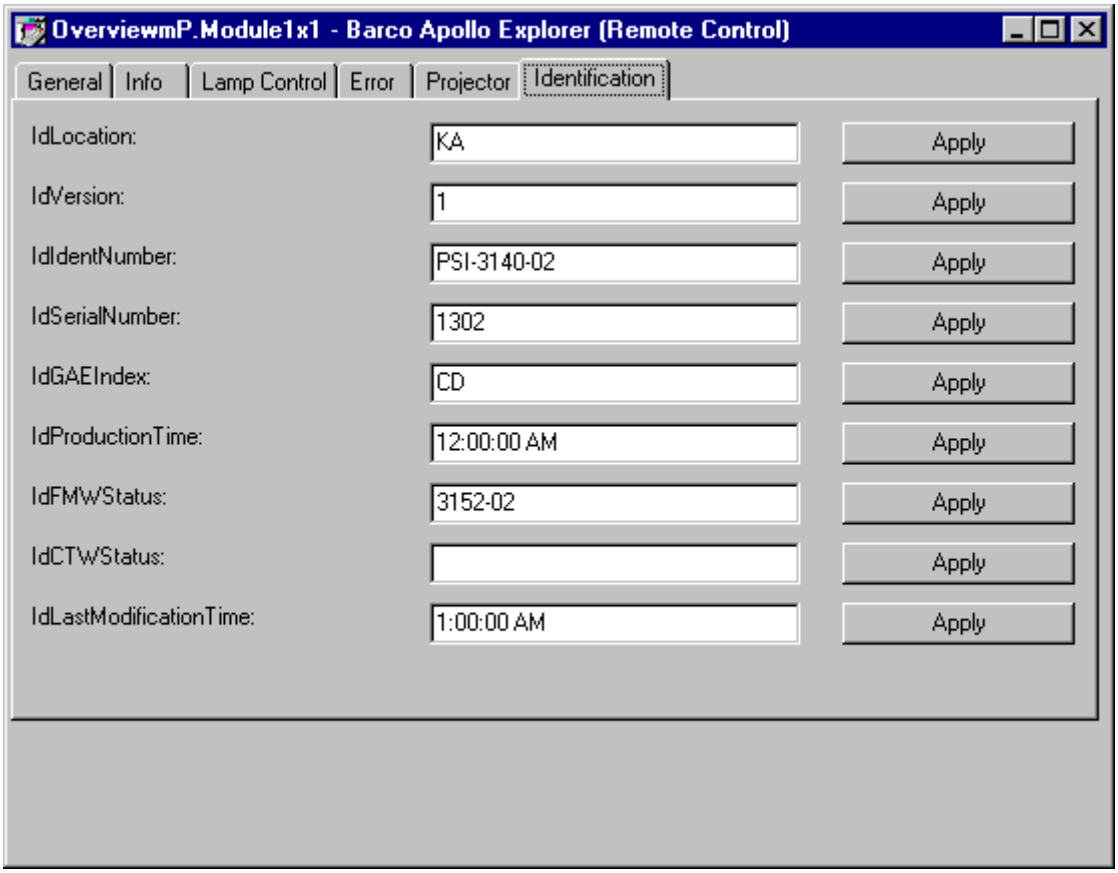
Lamp error	Lamp not working
I2C error	Error on the I2C Bus
Initialize error	Fan could not be initialized
I2C Status	Communication error of the I2C Bus
LatencyCounterActive	Latency counter is still running
Sync error	No video signal present
Over Temperature	Temperature above the limit
Temperature Failure	Lamp has been switched off due to over temperature
Fan Failure	Fan not working
In Load Sequence	Internal tables are initialized (interferences might occur)
Reinitialization	Settings saved in the EEPROM are loaded into the projector's RAM
Reset AC Fail Bit	Interrupts in the power supply set the AC-Fail Bit. The lamp can only be switched on again after having reset this bit, i. e. after pressing the Reset AC Fail Bit button. Look at the tab **Error** (**AC Fail**) to find out if the bit is set or not.
Reset Temp Bit	Temperatures above the defined limit set the **Temp Bit**. Look at the tab **Error** (**Over Temperature**) to find out if the bit is set or not. If the option **Off the lamp at Over Temperature** is checked, a lamp can only be switched on again after having reset the **Temp Bit.**

7.11.1.5 Projector



Sensor Temperature	Informs about the measured temperature
Fan Speed	Informs about the revolutions of the fan
Sensor Correction	Enter the correction factor for the sensor before starting up
Temperature Limit	Enter the permissible temperature

7.11.1.6 Identification

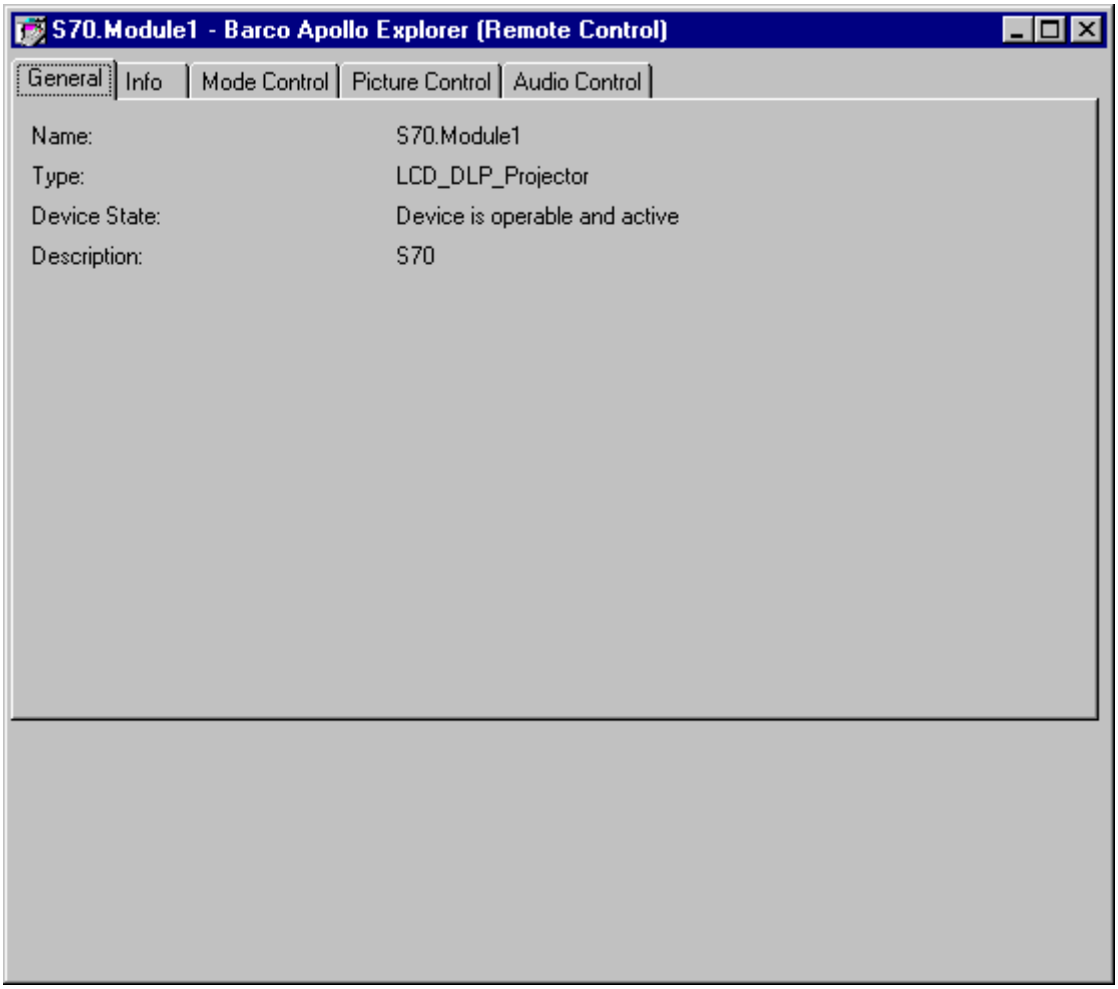


On this tab the "fingerprint" of the device can be found. Any on-site changes have to be entered in the respective text box.

IdLocation	Informs about the location of production
IdVersion	Informs about the version of the product
IdIdentNumber	Indicates the identification number of the device
IdSerialNumber	Indicates the serial number of the device
IdGAEIndex	Informs about engineering changes
IdProductionTime	Informs about the production time
IdFMWStatus	Shows the Firmware status
IdCTWStatus	Shows the Controlware status
IdLast Modification Time	Informs when the last modifcation took place

7.11.2 LCD_DLP Projectors

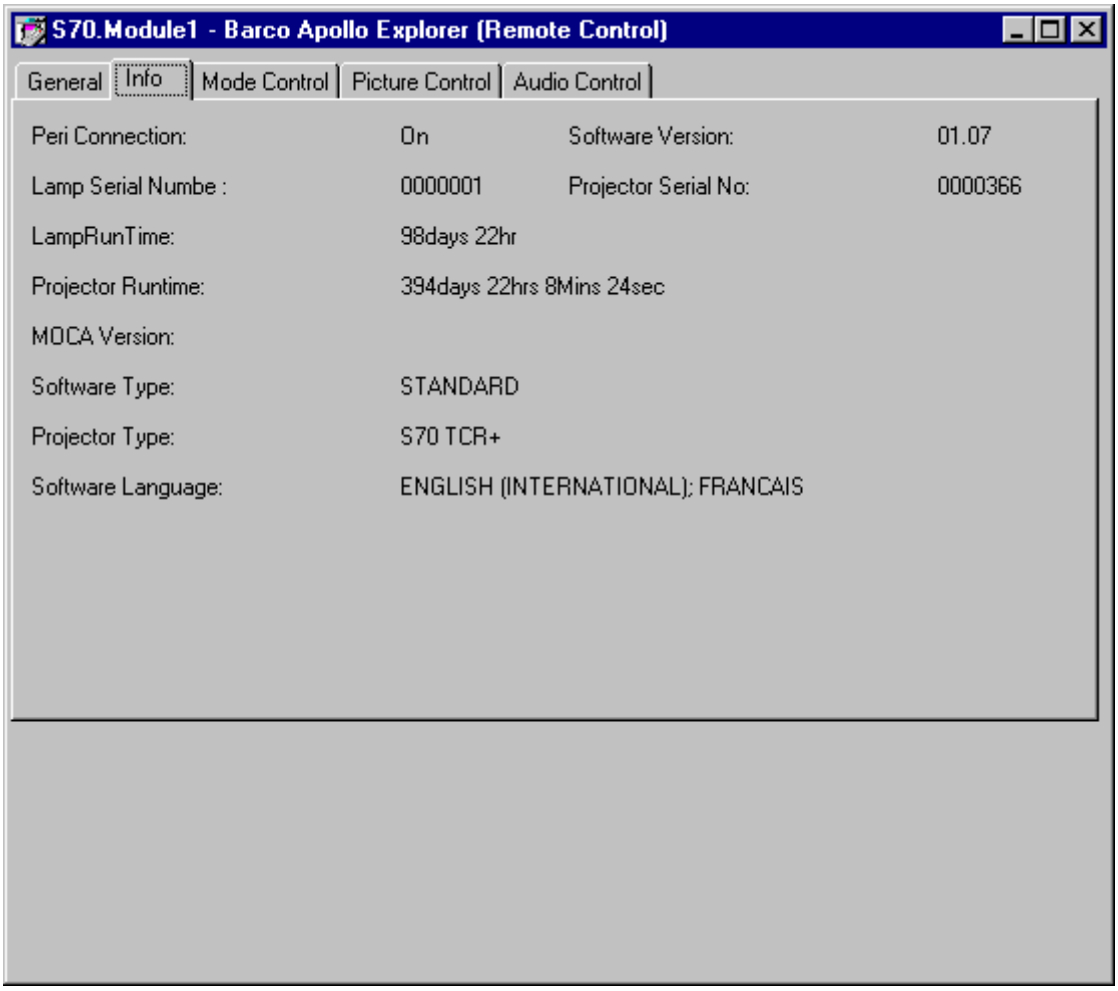
7.11.2.1 General



On this tab general information about the device are listed.

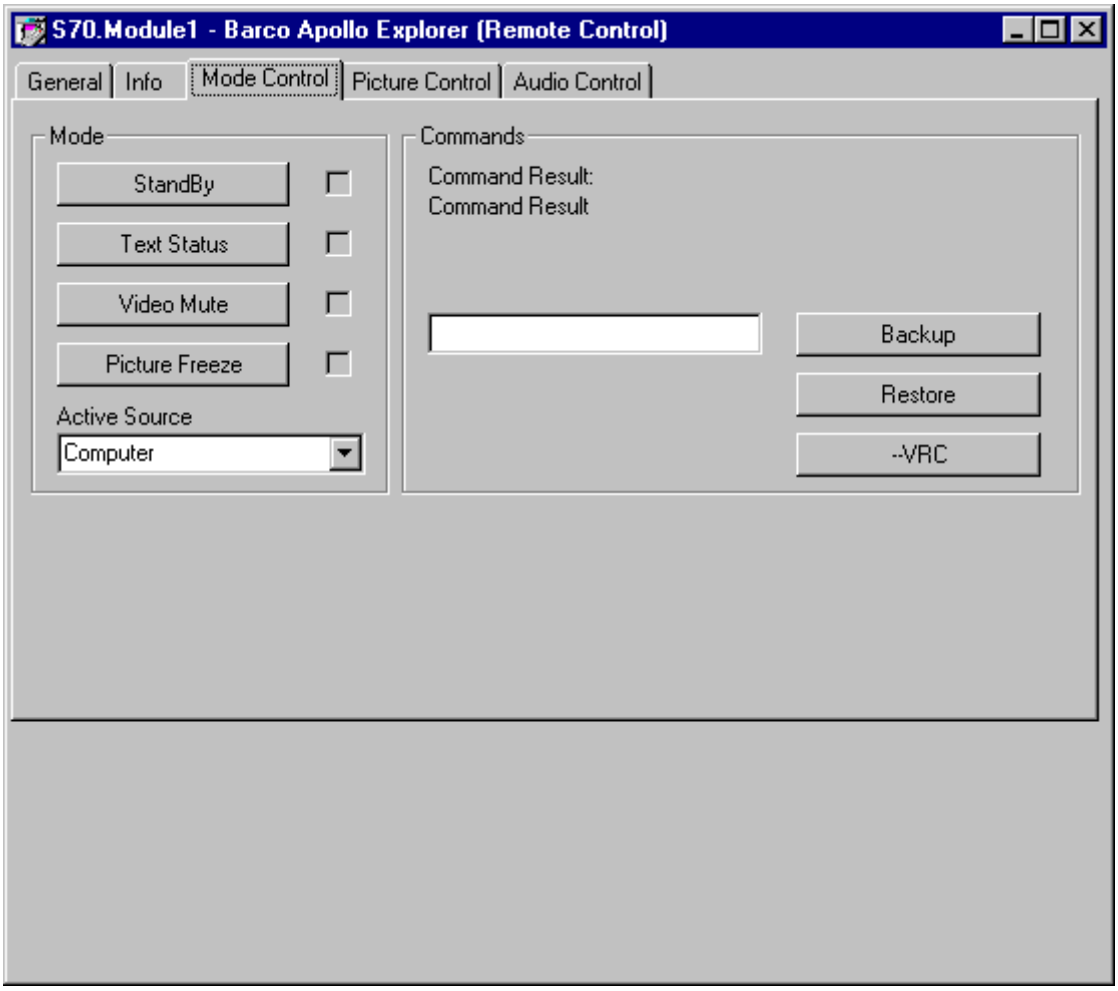
Name	Device name.
Type	All BR6xxx, BG6xxx projectors as well as the projection module S70 and Atlas CS4 are type LCD_DLP_Projectors.
Device State	Displays the current device status.
Description	Displays the designation for the type of module entered into the Control Room Configurator.

7.11.2.2 Info



Peri Connection	Informs about a peripheral connection
Lamp Serial Number	Indicates the serial number of the lamp
LampRun Time	Informs about the operating time of the lamp
Projector Runtime	Informs about the operating time of the projector
MOCA Version	indicates MOCA version
Software Type	Informs about the software type
Projector Type	Informs about the type of projector
Software Language	Indicates the language of the software
Software Version	Informs about software version
Projector Serial No.	Indicates the serial number of the projector

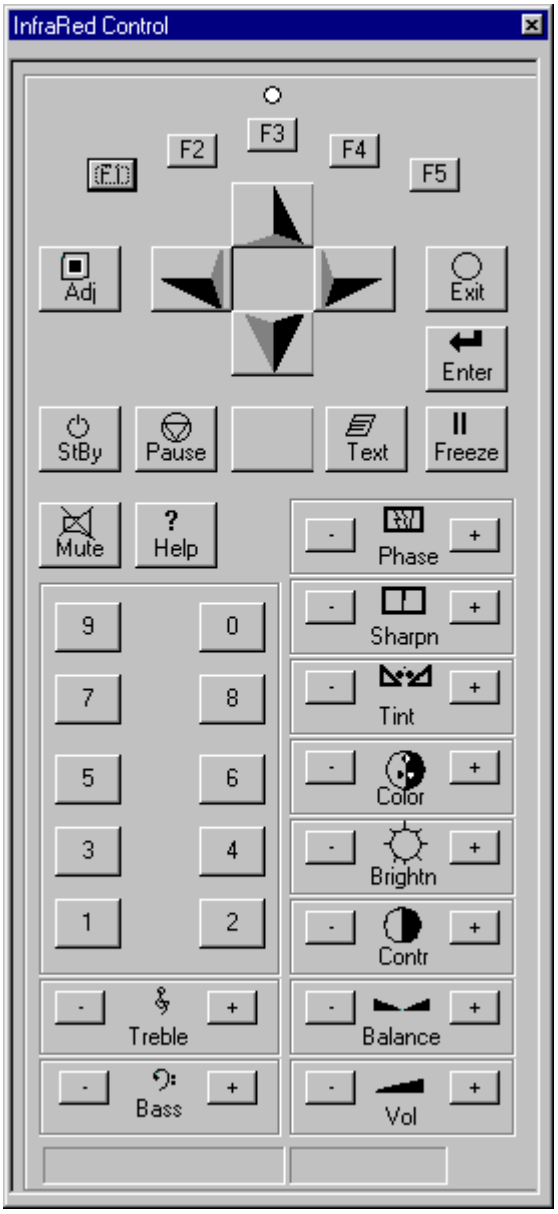
7.11.2.3 Mode Control



StandBy	Starts and stops the standby mode
Text Status	Starts and stops the text mode
Video Mute	Starts and stops video projection
Picture Freeze	Freezes and unfreezes a video
Active Source	Select the active source from the list box
Backup	Save the settings in a file. Enter the name of the file into the text field.
Restore	Restore the settings from a file. Enter the name of the file into the text field.
VCR	Click on this button to get access to the virtual remote control

7.11.2.4 Commands

All devices of the type LCD_DLP_Projector can be controlled via an infrared remote control. Click on the **–VRC** button to display a 1:1 image of the **IR remote control**. The following settings are possible



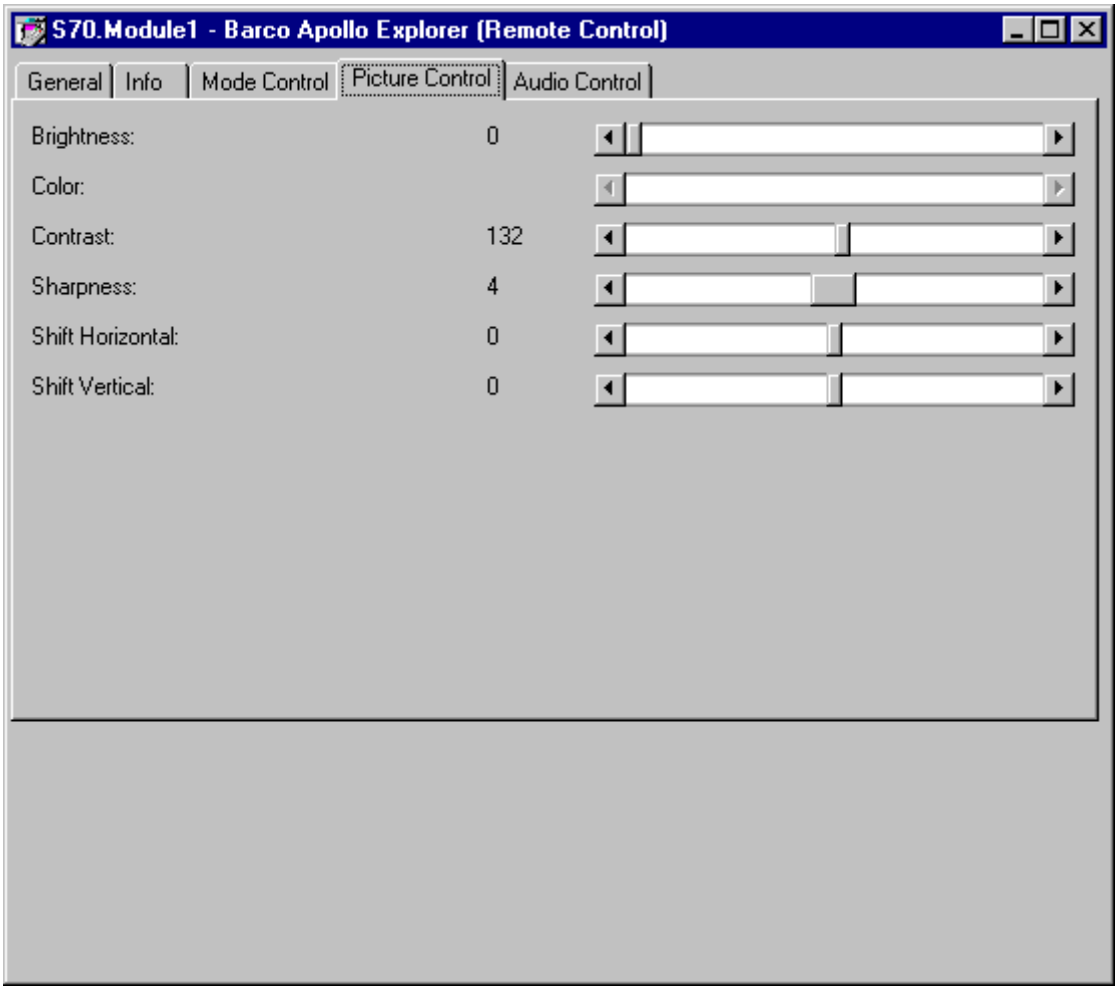
Function Keys F1, F2, F3, F4, F5	These are keys with direct access to almost all setting functions programmable by the user.
Adj Key	Start or end of the setting mode.
Exit Key	Jumping to previous branch of the setting mode menu tree or exiting the setting mode altogether.
Enter Key	Starting the setting mode as well as confirmation of a settings or selection during the setting mode.
Cursor Keys	Select menus in the setting mode and correct settings requiring continuous adjustment.
Standby Key	Activates and deactivates the projector if the power of the projector has been turned on with the projector's ON switch.
Pause	Short interruption of the projection. The image is no longer displayed but an immediate projection is possible.
* (Selection Key)	Direct access to the zoom, focus, shift functions.
Txt	Active only during operation. Use this feature to activate/deactivate the bar scale displayed during the image or sound parameter modification.
Freeze	Displays freeze-frame of image.
Mute	Turns sound on or off.
Help	Starts the help menu.
Numeric Keys 1-9	Direct access selection; use to enter the address of a projector.
Phase, Sharpness, Tint, Color, Brightness, Contrast	Set image properties as desired. Push on **<** to reduce, on **>** to increase the set value.
Tremble, Balance, Bass, Volume	Set audio properties as desired. Push on < to reduce, on > to increase the set value.

Use **Virtual IR Control** to gain access to the setting mode and with that to all menus to modify the source parameters, image and sound settings, as well as the geometric setting. The setting mode is described in detail in the user manual of the device.

Any modifications can be saved (**Backup**) or restored (**Restore**) from binary file located on a linked computer.

Detailed descriptions and the user element functions are listed in the respective user manual of the device.

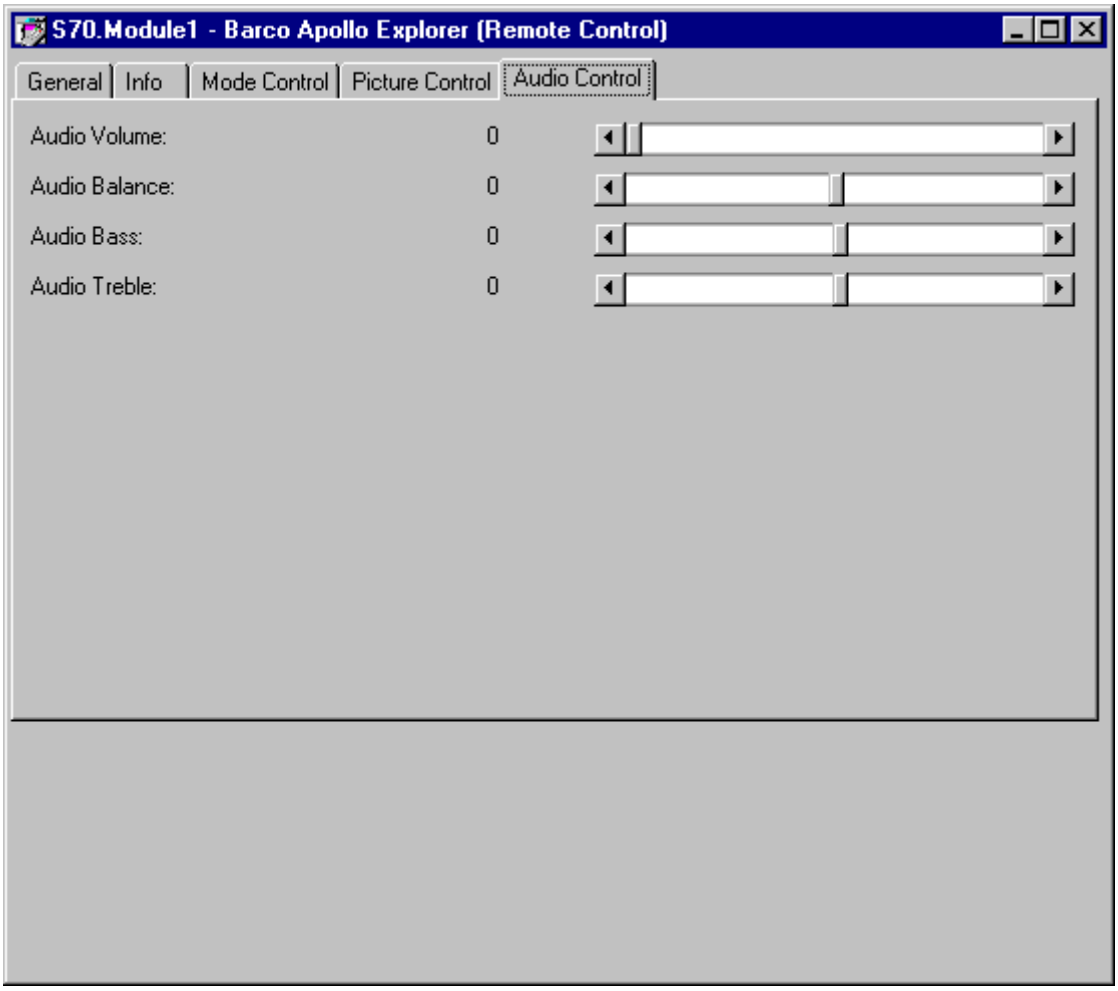
7.11.2.5 Picture Control



Corresponds to the respective keys on the virtual IR remote control. The actual value of the setting is displayed. The slider bars are only active if the option is available

Brightness	Increases or decreases brightness
Color	Changing of color saturation is only possible for video and S-video
Contrast	Increases or decreases contrast
Sharpness	Increases or decreases sharpness
Shift Horizontal	Shifts picture horizontally
Shift Vertical	Shifts picture vertically

7.11.2.6 Audio Control

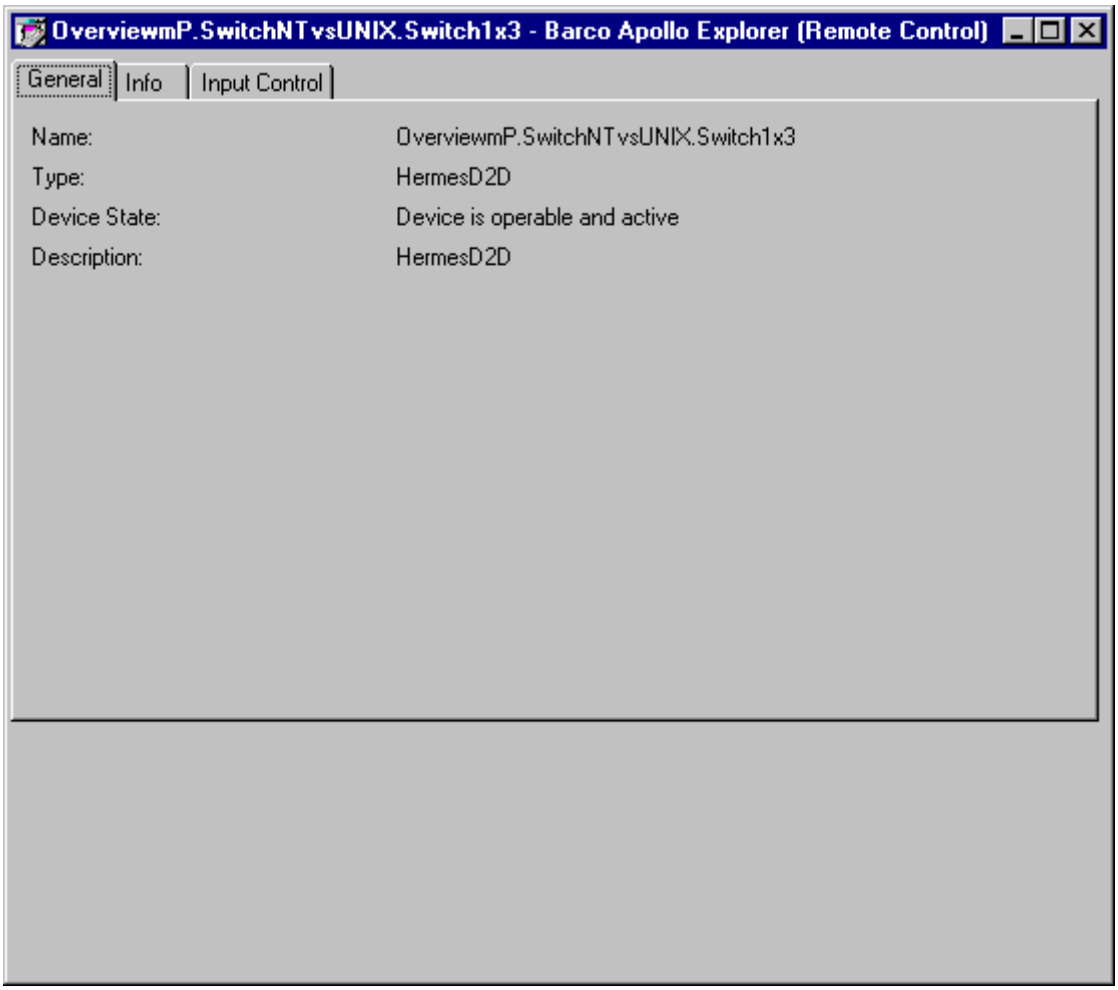


Corresponds to the respective keys on the virtual IR remote control. The actual value of the setting is displayed. The slider bars are only active if the option is available.

Audio Volume	adjusts audio volume
Audio Balance	Adjusts balance
Audio Bass	Adjusts bass
Audio Treble	Adjusts treble

7.11.3 Hermes D2D

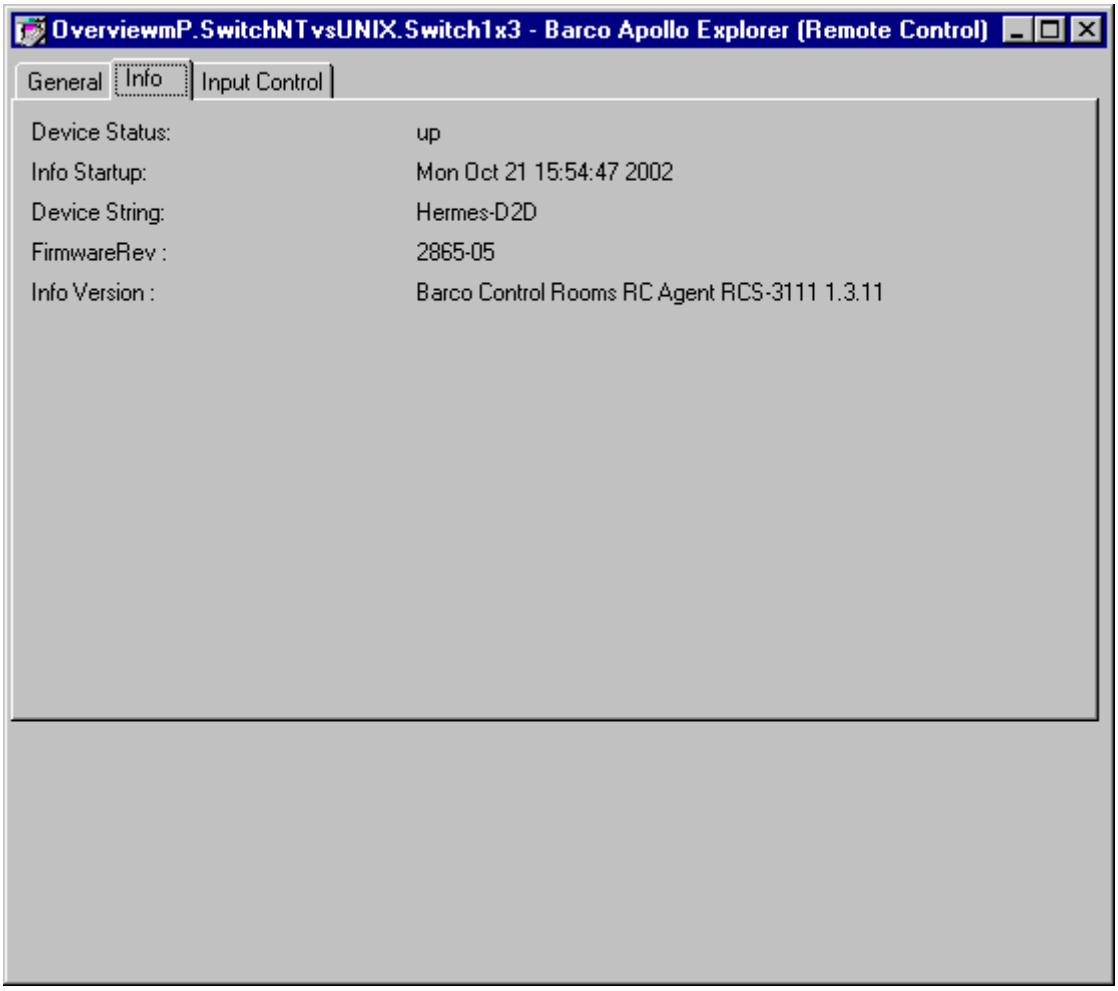
7.11.3.1 General



On this tab general information about the device are listed.

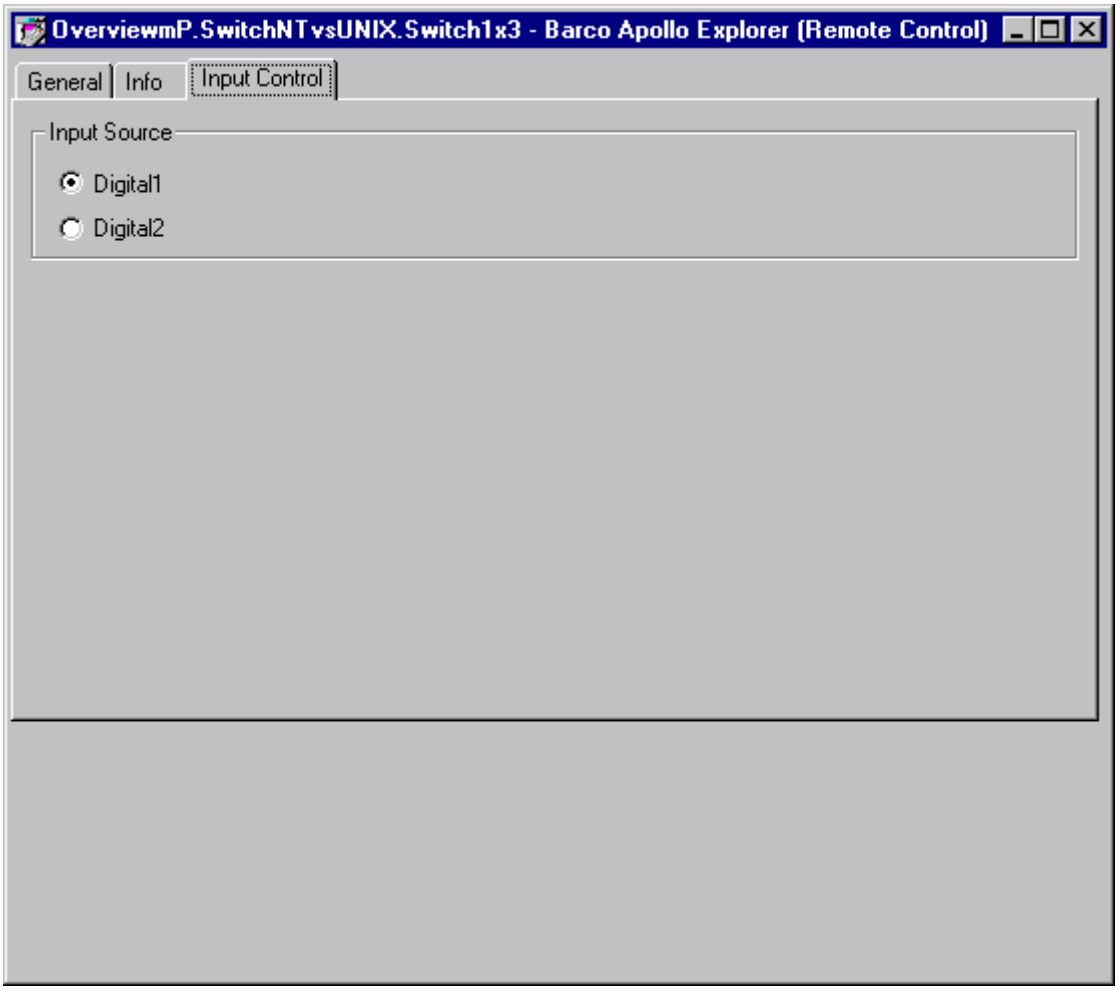
Name	Assigned by Control Room Configurator
Type	Indicates the device (Hermes D2D)
Device State	Gives information if the device can be addressed by the SNMP Agent
Description	Displays the designation for the type of module entered into the Control Room Configurator

7.11.3.2 Info



Device Status	Informs about the current operating state of the device
Info Startup	Informs when the SNMP Agent has been launched
Device String	Passes the internal device info
FirmwareRev	Indicates the Firmware revision
Info Version	Informs about the SNMP Agent (type and version)

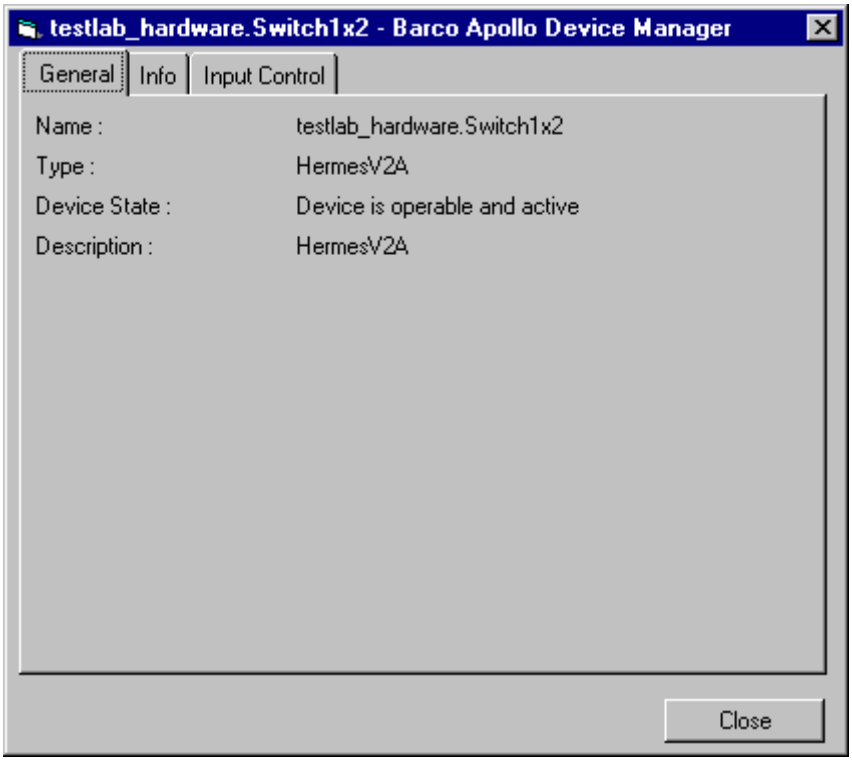
7.11.3.3 Input Control



Digital1	Selection of Digital In 1 to be the active input
Digital2	Selection of Digital In 2 to be the active input

7.11.4 Hermes V2A

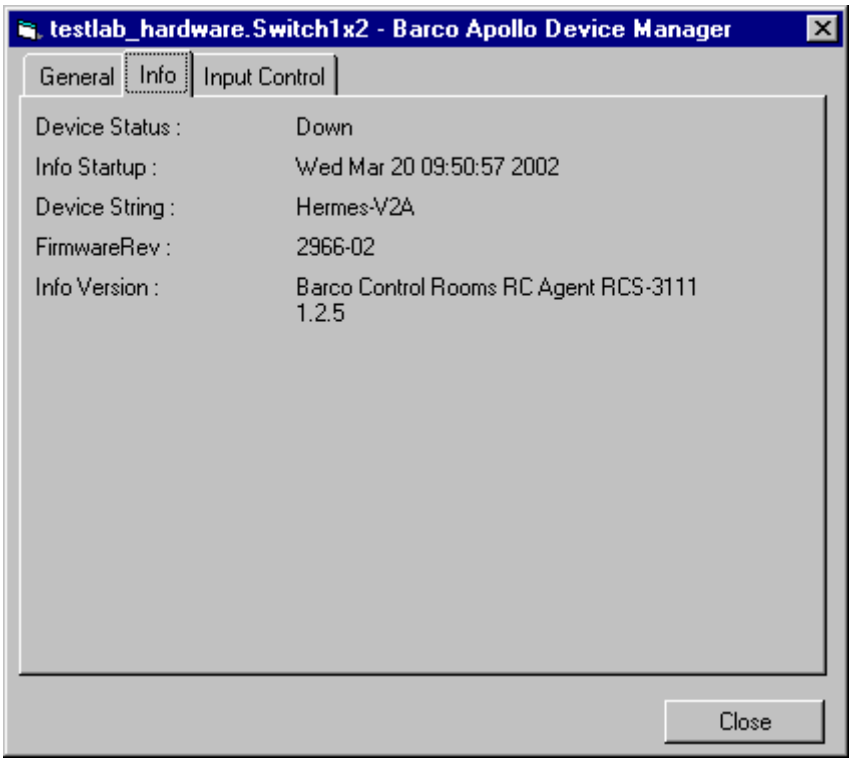
7.11.4.1 General



On this tab general information about the device are listed.

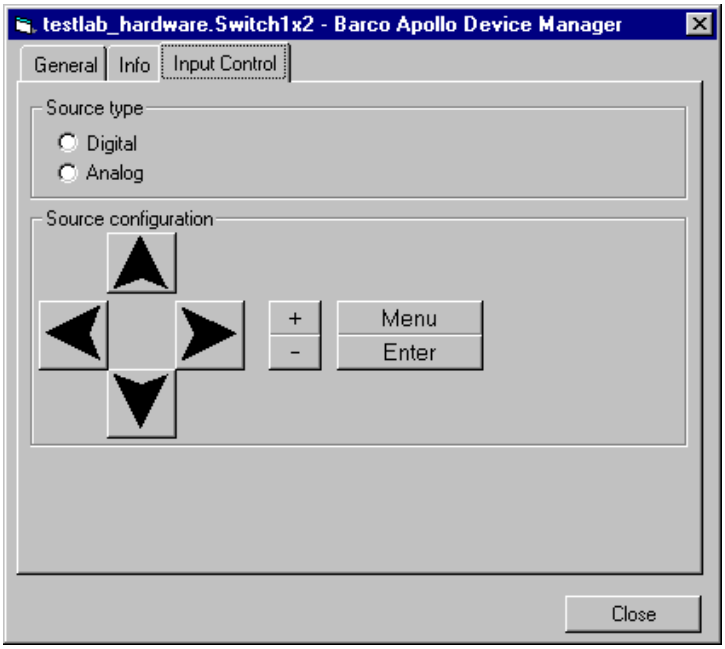
Name	Assigned by Control Room Configurator
Type	Indicates the device (Hermes V2A)
Device State	Gives information if the device can be addressed by the SNMP Agent
Description	Displays the designation for the type of module entered into the Control Room Configurator

7.11.4.2 Info



Device Status	Informs about the current operating state of the device
Info Startup	Informs when the SNMP Agent has been launched
Device String	Passes the internal device info
FirmwareRev	Indicates the Firmware revision
Info Version	Informs about the SNMP Agent (type and version)

7.11.4.3 Input Control



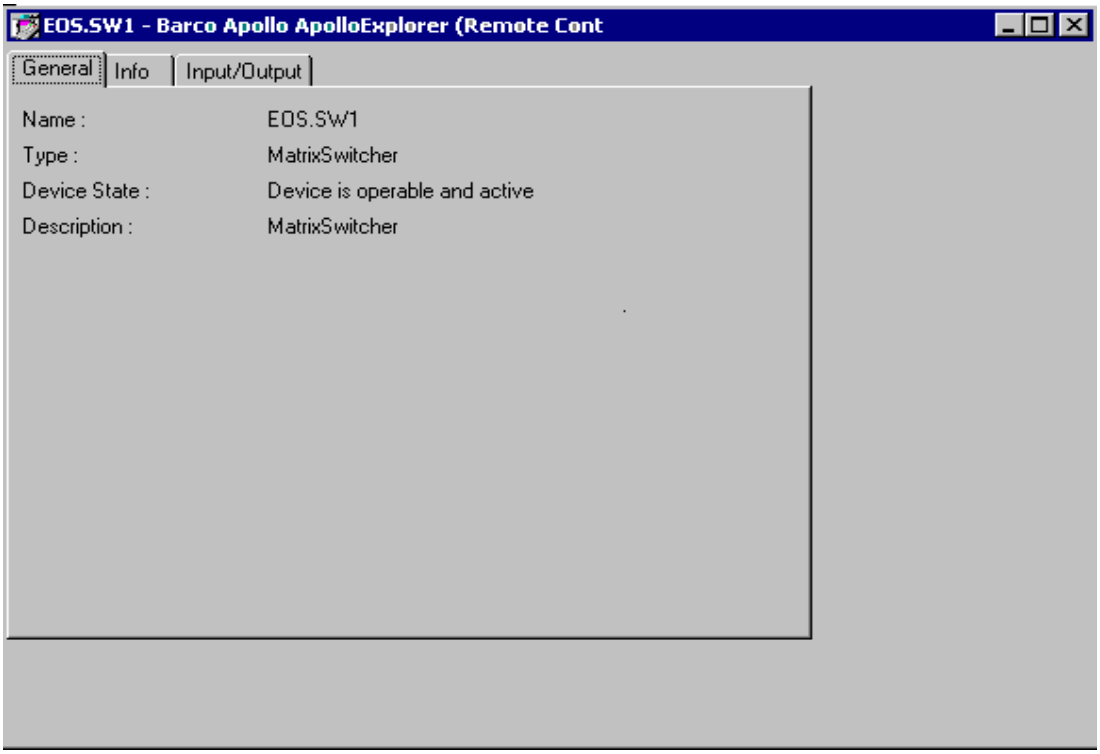
Source Type	Select **Digital** to activate the digital input, **Analog** to activate the analog input
Source Configuration	If the active input is the analog one, the settings of the source can be adjusted

The following table gives an overview about operating the onscreen menu:

Menu	description
	navigating in **main menu** or **submenu**
	navigating in **main menu** or **submenu**
	leaving a **submenu** or the **main menu**
	entering a **submenu**
	increasing a value
	decreasing a value
Menu	opening **main menu** or leaving **main menu**
Enter	selecting a **menu** item saving a value (confirmation when leaving the corresponding submenu)

7.11.5 Matrix Switcher

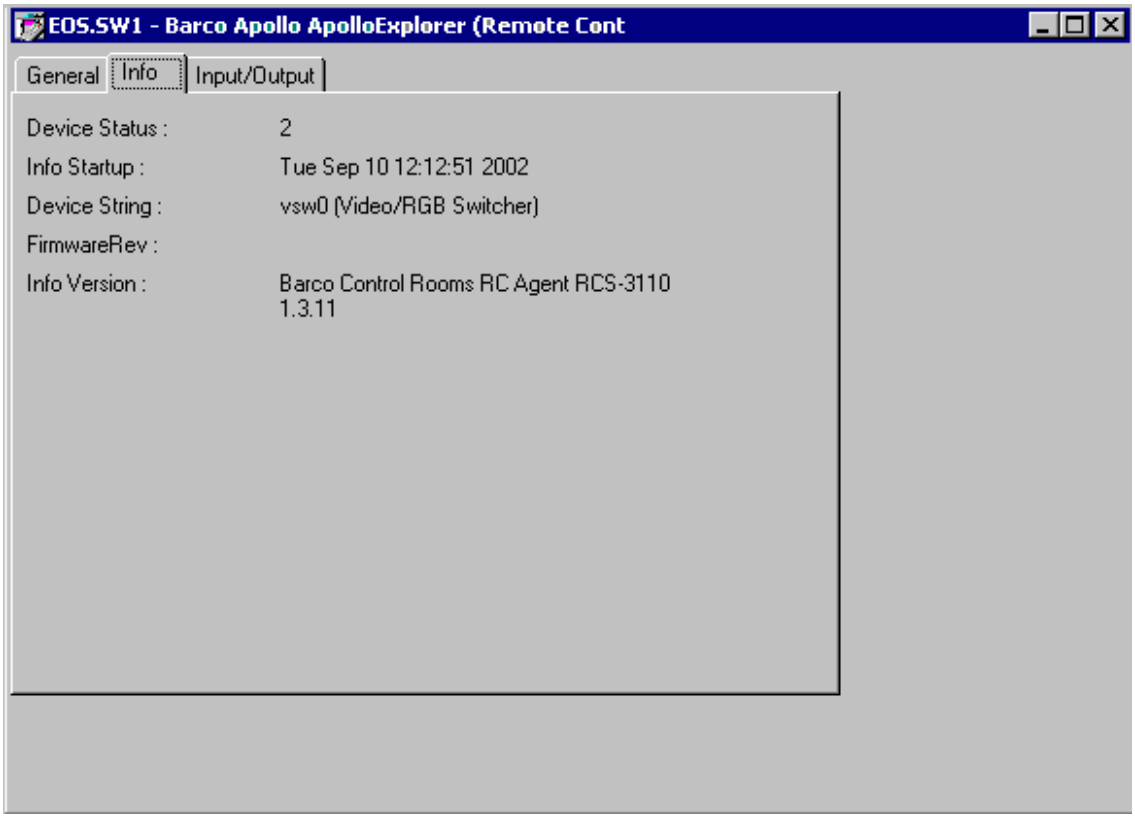
7.11.5.1 General



On this tab general information about the device are listed.

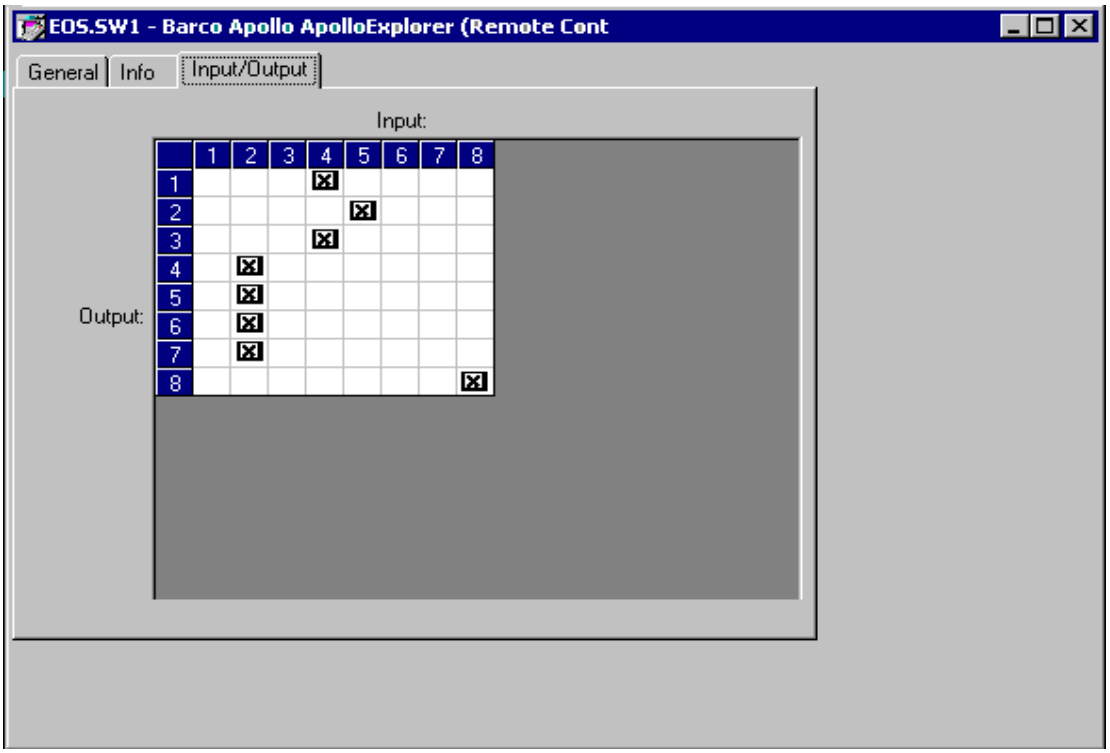
Name	Assigned by Control Room Configurator
Type	Indicates the device (Matrix Switcher)
Device State	Gives information if the device can be addressed by the SNMP Agent
Description	Displays the designation for the type of module entered into the Control Room Configurator

7.11.5.2 Info



Device Status	Informs about the current operating state of the device
Info Startup	Informs when the SNMP Agent has been launched
Device String	Passes the internal device info
FirmwareRev	Indicates the Firmware revision
Info Version	Informs about the SNMP Agent (type and version)

7.11.5.3 Input/Output



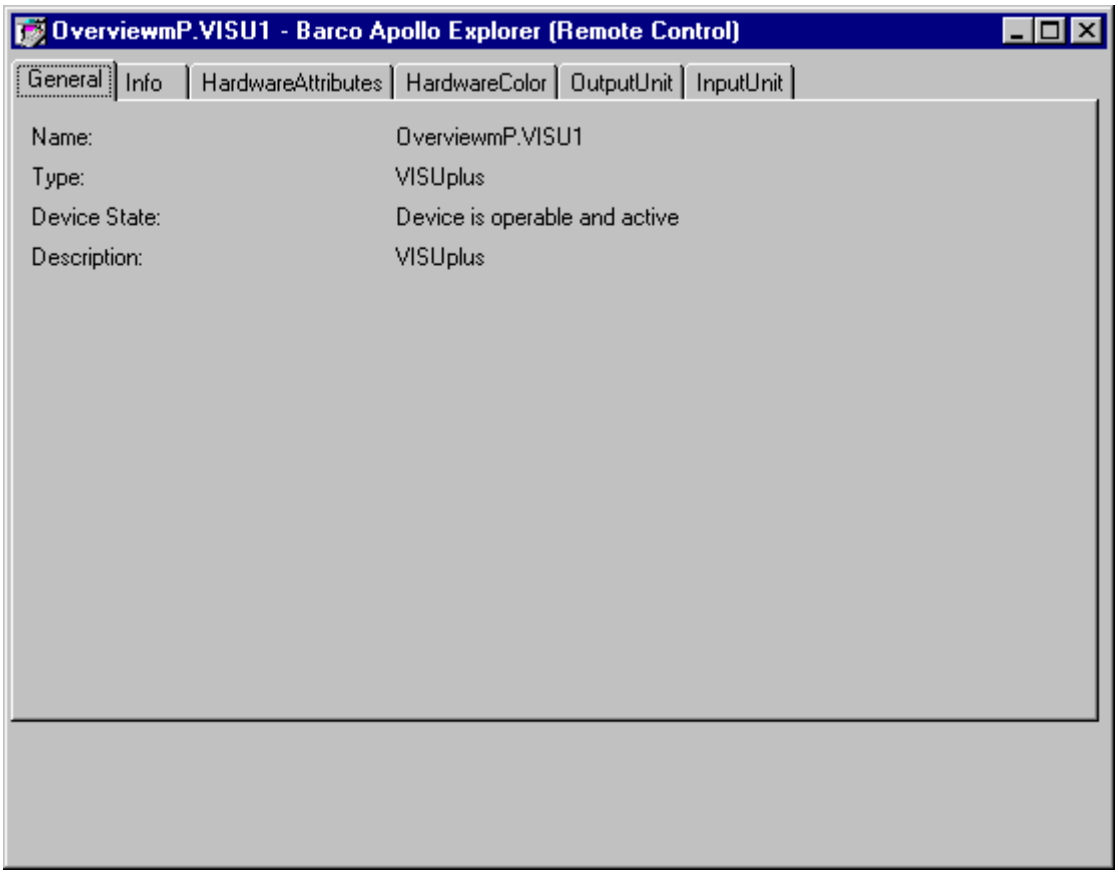
On this tab is indicated which **inputs** are assigned to which **outputs**.

The signal of input 2 is connected to the outputs 4, 5, 6, and 7, the signal of the input 4 is connected to the outputs 1 and 3 and so on.

The assignments can be changed.

7.11.6 Visu

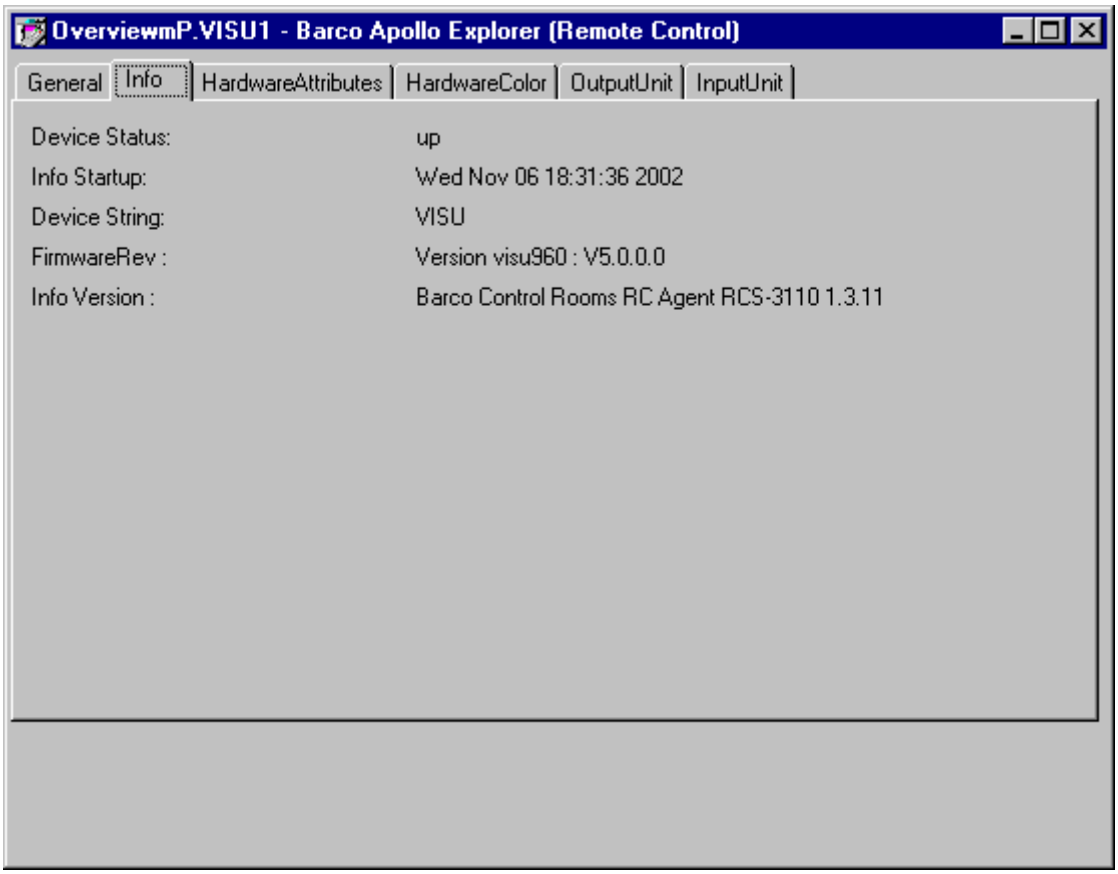
7.11.6.1 General



On this tab general information about the device are listed.

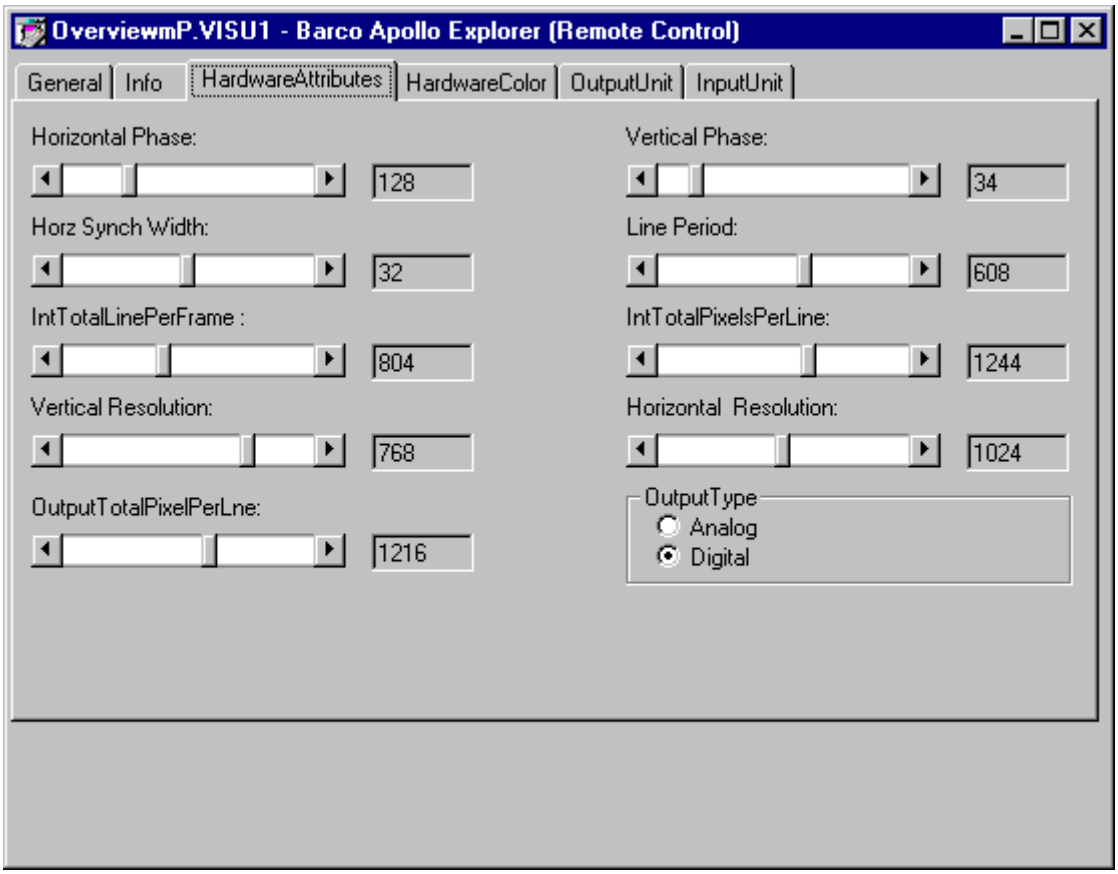
Name	Assigned by Control Room Configurator
Type	Indicates the device (Visu plus)
Device State	Gives information if the device can be addressed by the SNMP Agent
Description	Displays the designation for the type entered into the Control Room Configurator

7.11.6.2 Info



Device Status	Informs about the current operating state of the device
Info Startup	Informs when the SNMP Agent has been launched
Device String	Passes the internal device info
FirmwareRev	Indicates the Firmware revision
Info Version	Informs about the SNMP Agent (type and version)

7.11.6.3 HardwareAttributes

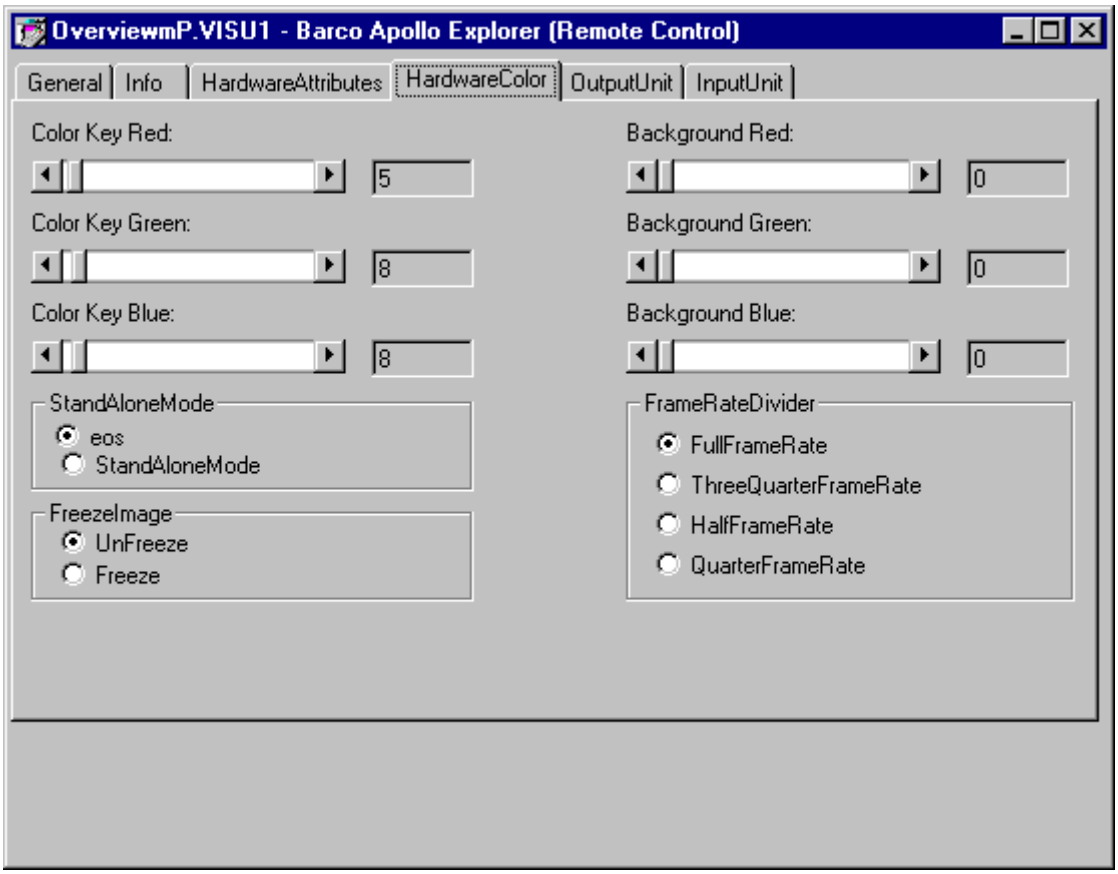


On this tab the **Visu** parameters can be adjusted if the ones loaded into the **Visu** from the **VisuBaseConfiguration.ini** file are not satisfying.

The modifications are not written into to VisuBaseConfiguration.ini file. You have to manually adjust the parameters in the Visio drawing and export the configuration in order to preserve them. As a "small solution" you can manually edit the VisuBaseConfiguration.ini file. However, as soon the the project is updated, these modifications will be lost and overwritten by the Control Room Configurator.

Apollo only supports Digital Visu.

7.11.6.4 Hardware Color



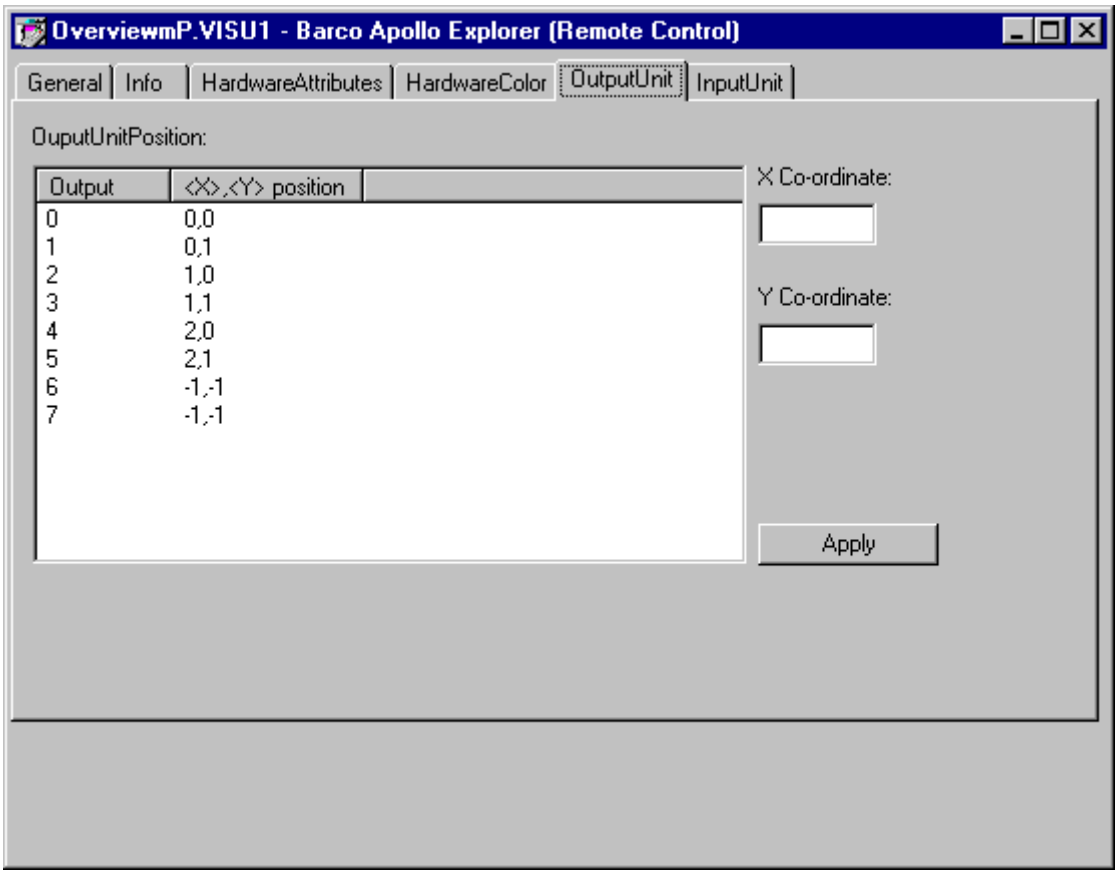
Define the color key as an RGB-Trippel as well as the color of the Visu window if no signal is applied.

Modification of these settings are restricted to authorized personnell only!

On this tab also the option **Freeze** can be selected and the factor of the frame rate reduction can be set.

These settings apply for the visu device, not for an input unit! Therefore, if the Visu e.g. has 4 video input units, e.g. all four videos are frozen.

7.11.6.5 Output Unit



Use this tab to view the assignment of the **Visu** outputs to the projection modules.

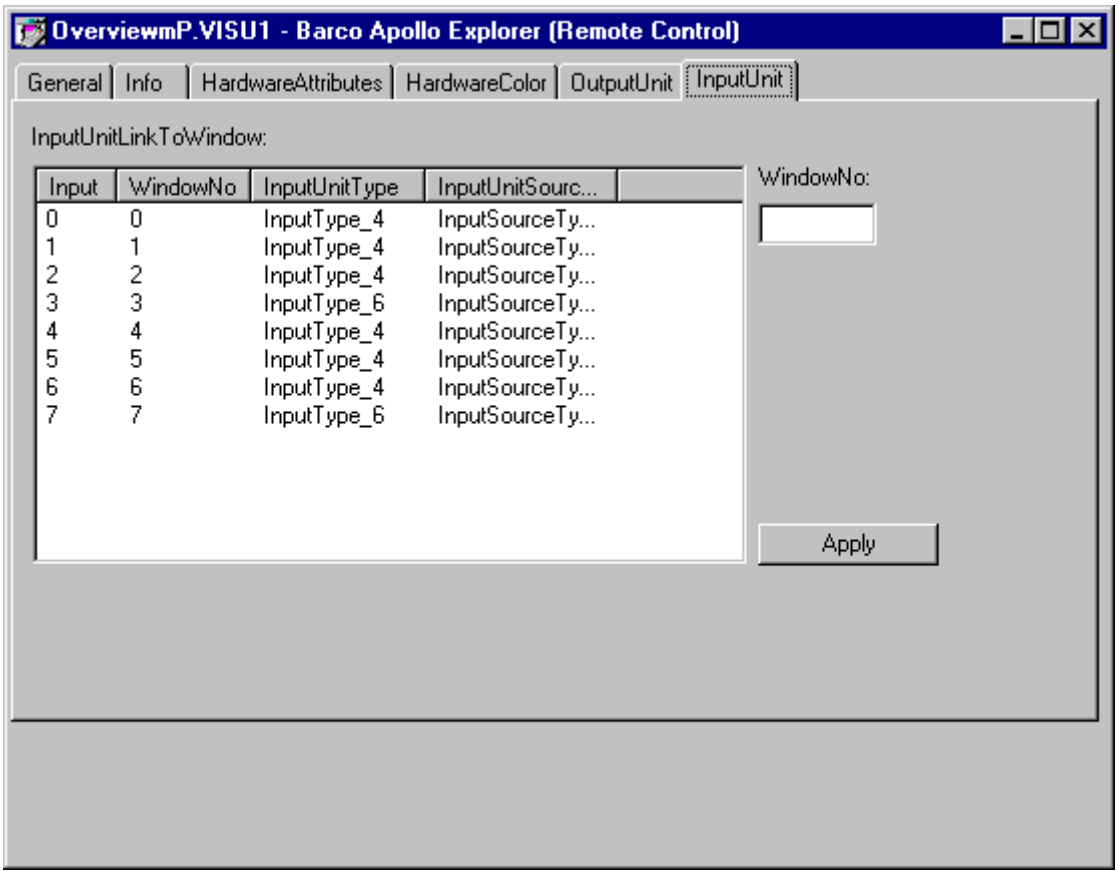
This assignment depends on the actual cabling!

Modification of these settings are restricted to authorized personnell only!

A projection cube can only be assigned to one single Visu output unit. When changing the hardware configuration without re-starting Apollo, this kind of modifications can be applied by means of the entries of this tab.

Since the projection cube cannot be assigned simultaneously to the previous and to the current Visu output unit, the previous output unit has to be assigned first to a "cube which is not available" (-1, -1).

7.11.6.6 Input Unit



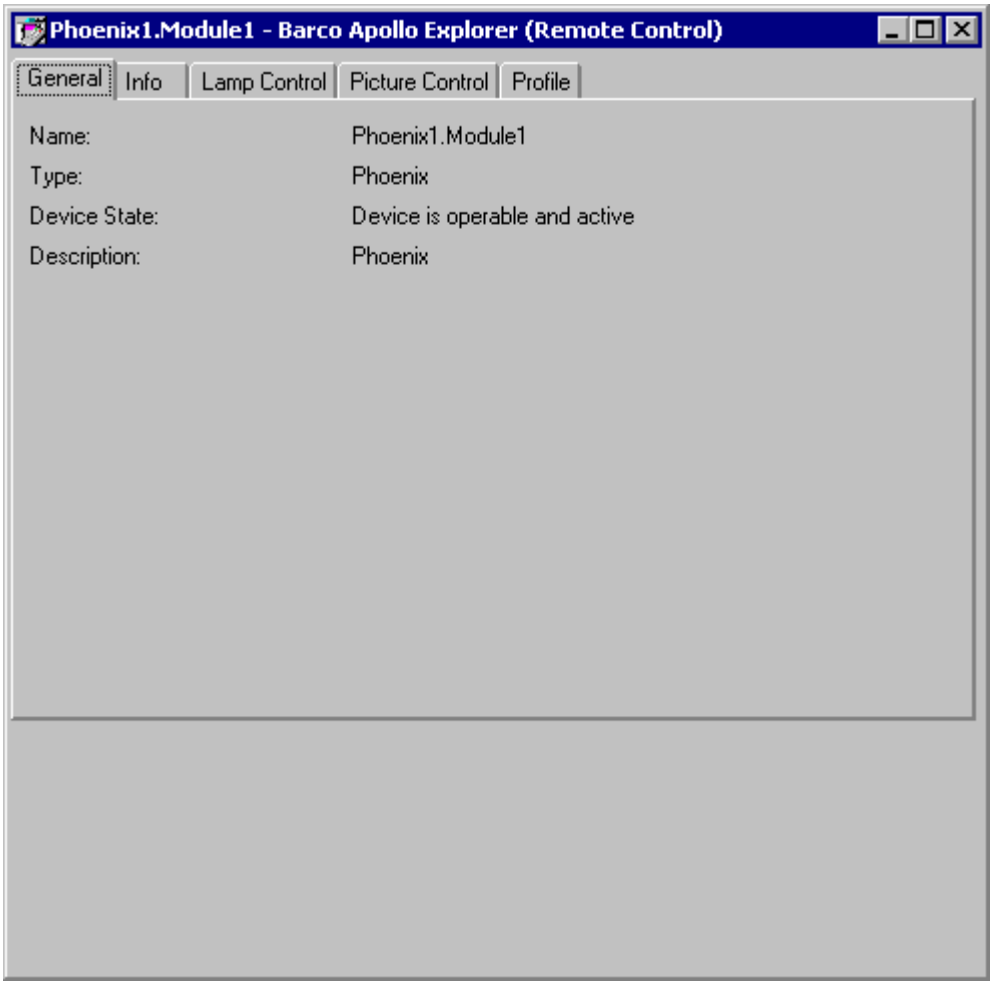
Use this tab to view what kind of input unit is plugged into the **Visu**; InputType_4 refers to a VideoInput Unit, InputType_6 to a RGBInput Unit.

The assignment of the input units to the windows are made internally by the **Visu** device itself.

Modification of these settings are restricted to authorized personnell only!

7.11.7 Phoenix Projector DX

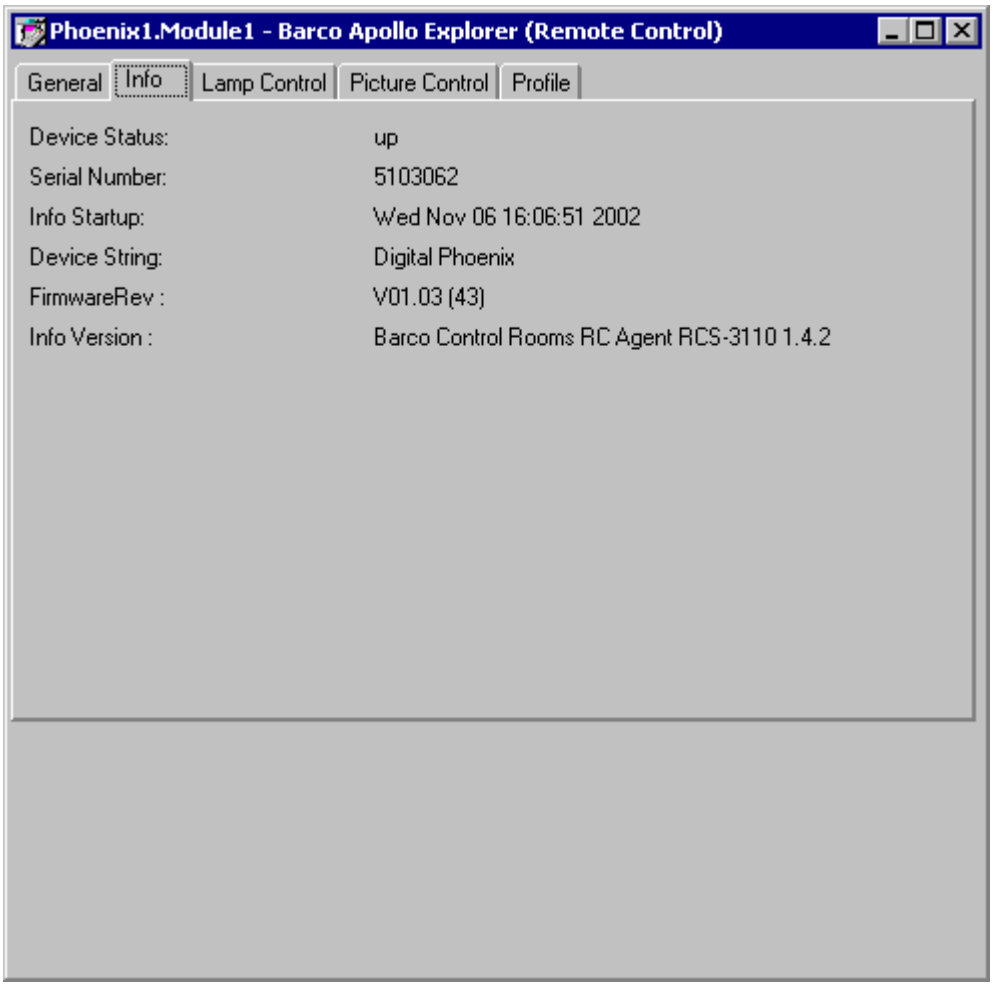
7.11.7.1 General



On this tab general information about the device are listed.

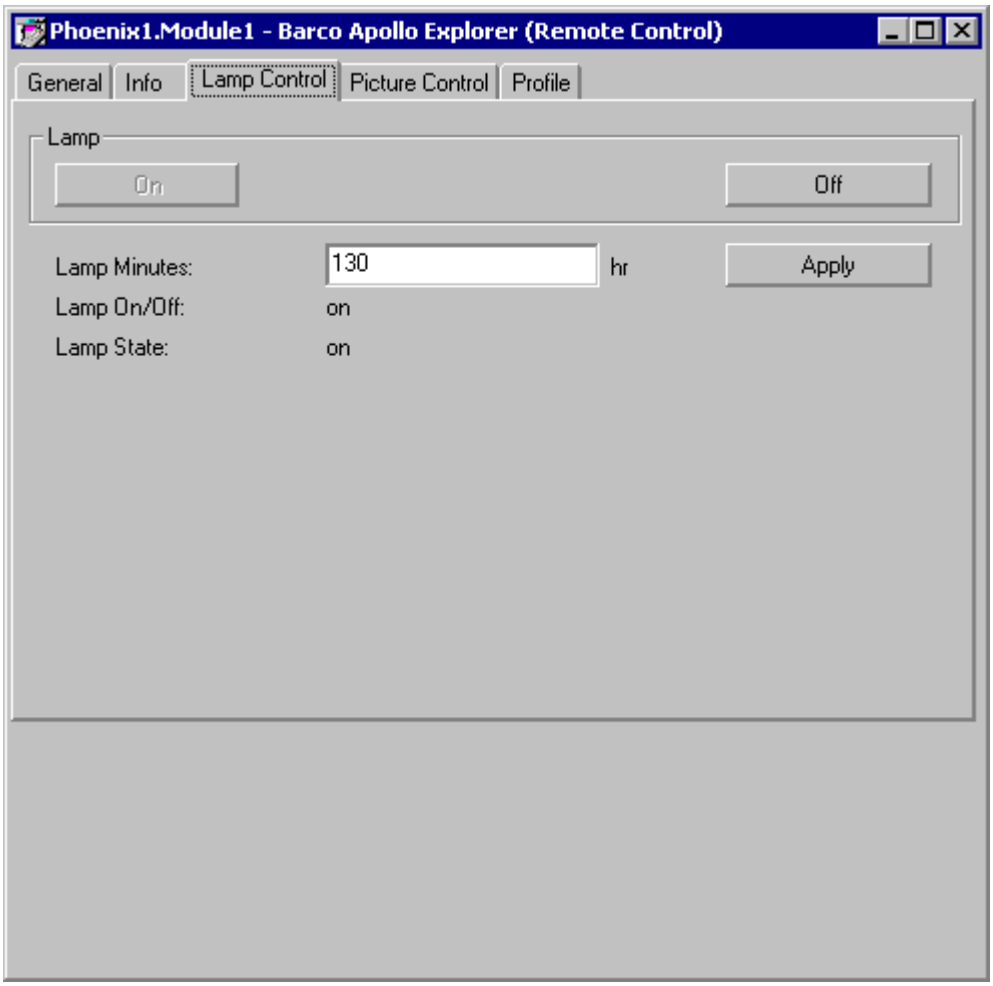
Name	Device name.
Type	Phoenix
Device State	Displays the current device status.
Description	Displays the designation for the type entered into the Control Room Configurator.

7.11.7.2 Info



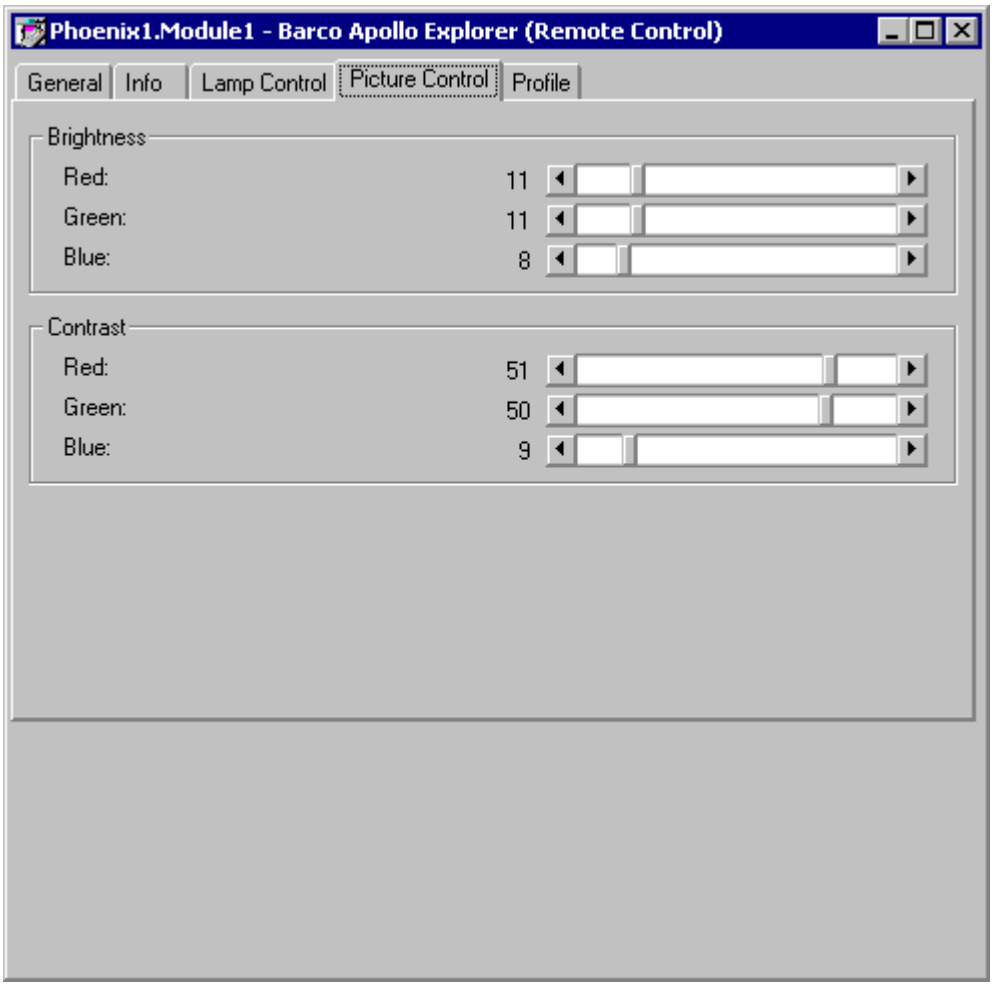
Device Status	Informs about the current operating state of the device
Serial Number	Indicates the serial number of the projector
Info Startup	Informs when the SNMP Agent has been launched
Device String	Passes the internal device info
FirmewareRev	Indicates the Firmware revision
Info Version	Informs about the SNMP Agent (type and version)

7.11.7.3 Lamp Control



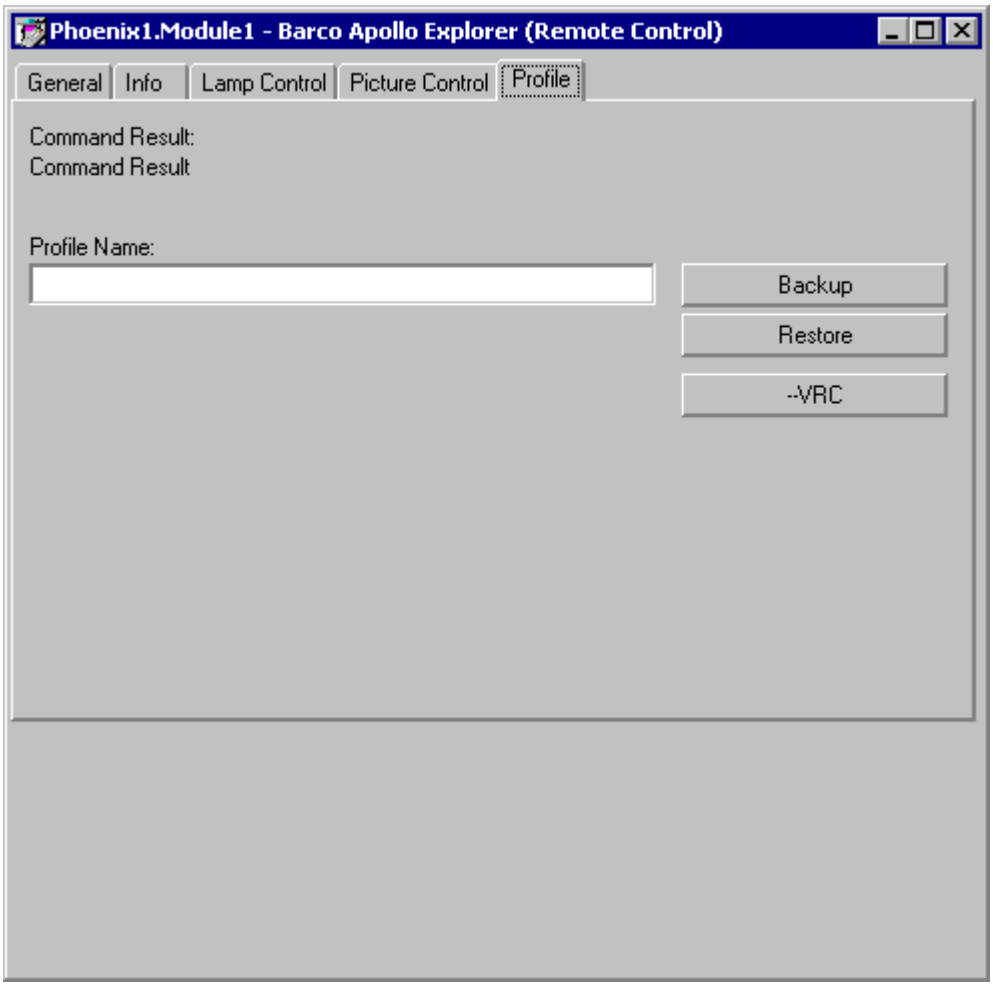
Lamp	Toggle between switching lamp on and off. The **ON** button is only active if the lamp is off. The same applies to the **OFF** button. Displays the service life of the lamp. This value can be edited after the lamp has been replaced.
Lamp Minutes	Shows the current lamp operation time
Lamp State	Indicates the lamp status (on, off, on-wait, off-wait)

7.11.7.4 Picture Control



Brightness Red	Increases or decreases brightness for red
Brightness Green	Increases or decreases brightness for green
Brightness Blue	Increases or decreases brightness for blue
Contrast Red	Increases or decreases contrast for red
Contrast Green	Increases or decreases contrast for green
Contrast Blue	Increases or decreases contrast for blue

7.11.7.5 Profile

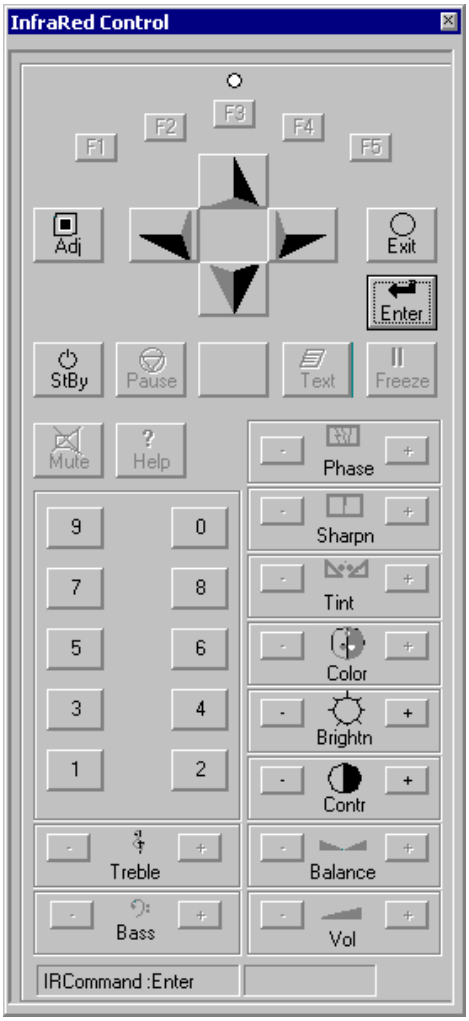


The settings of the projector (brightness, contrast...) can be saved in file (**Backup**) or restored from a file (**Restore**). Enter the name of the profile file.

Click on the **VRC** button to get access to the **Virtual Remote Control**. The keys and the functions are identical to the Infra Red Remote Control Unit to control the projector.

7.11.7.6 Commands

The device can be controlled via an infrared remote control. Click on the **–VRC** button to display a 1:1 image of the **IR remote control**. The following settings are possible



Adj Key	Start or end of the setting mode.
Exit Key	Jumping to previous branch of the setting mode menu tree or exiting the setting mode altogether.
Enter Key	Starting the setting mode as well as confirmation of a settings or selection during the setting mode.
Cursor Keys	Select menus in the setting mode and correct settings requiring continuous adjustment.
Standby Key	Activates and deactivates the projector if the power of the projector has been turned on with the projector's ON switch.
Numeric Keys 1-9	Direct access selection; use to enter the address of a projector.
Brightness, Contrast	Set image properties as desired. Push on **<** to reduce, on **>** to increase the set value.

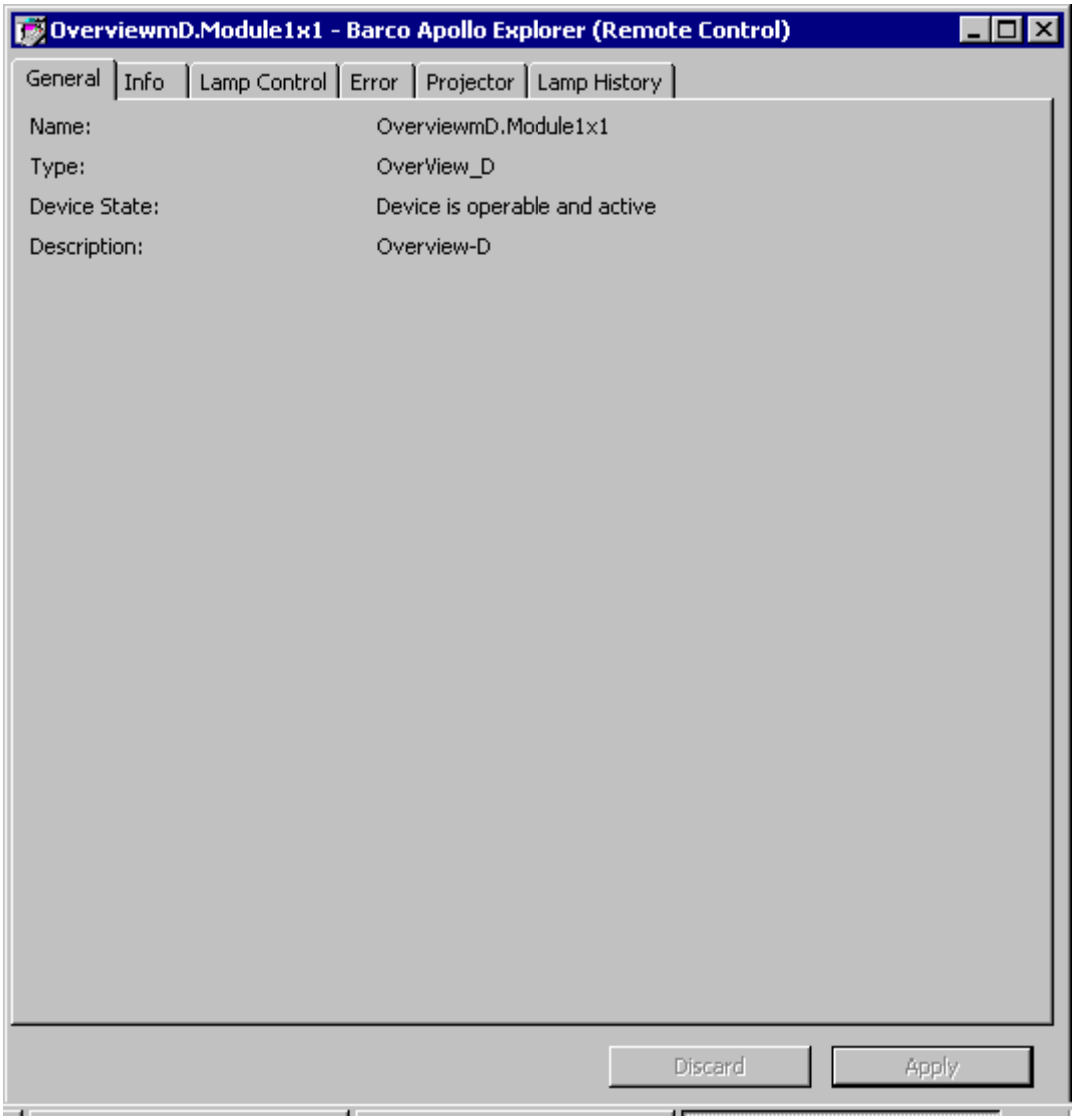
Use **Virtual IR Control** to gain access to the setting mode and with that to all menus to modify the source parameters, image and sound settings, as well as the geometric setting. The setting mode is described in detail in the user manual of the device.

Any modifications can be saved (**Backup**) or restored (**Restore**) from binary file located on a linked computer.

Detailed descriptions and the user element functions are listed in the respective user manual of the device.

7.11.8 OverView D

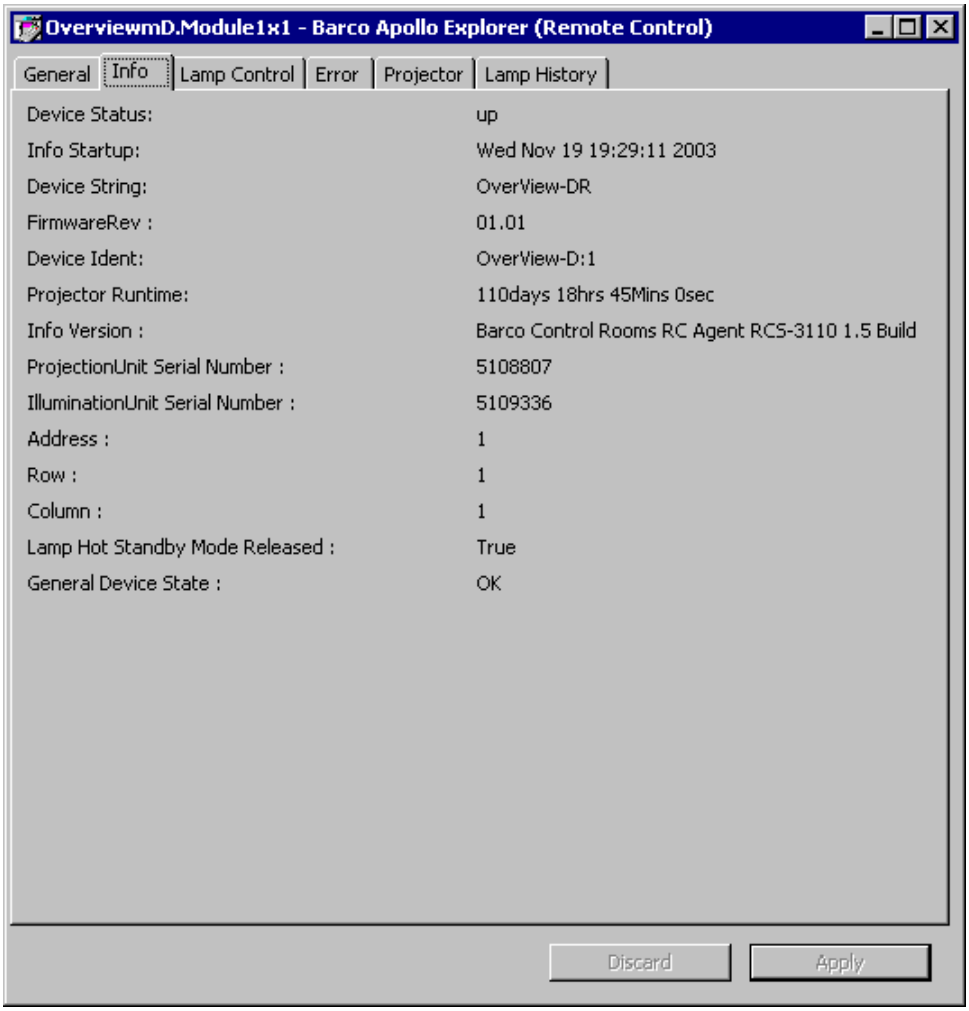
7.11.8.1 General



On this tab general information about the device are listed.

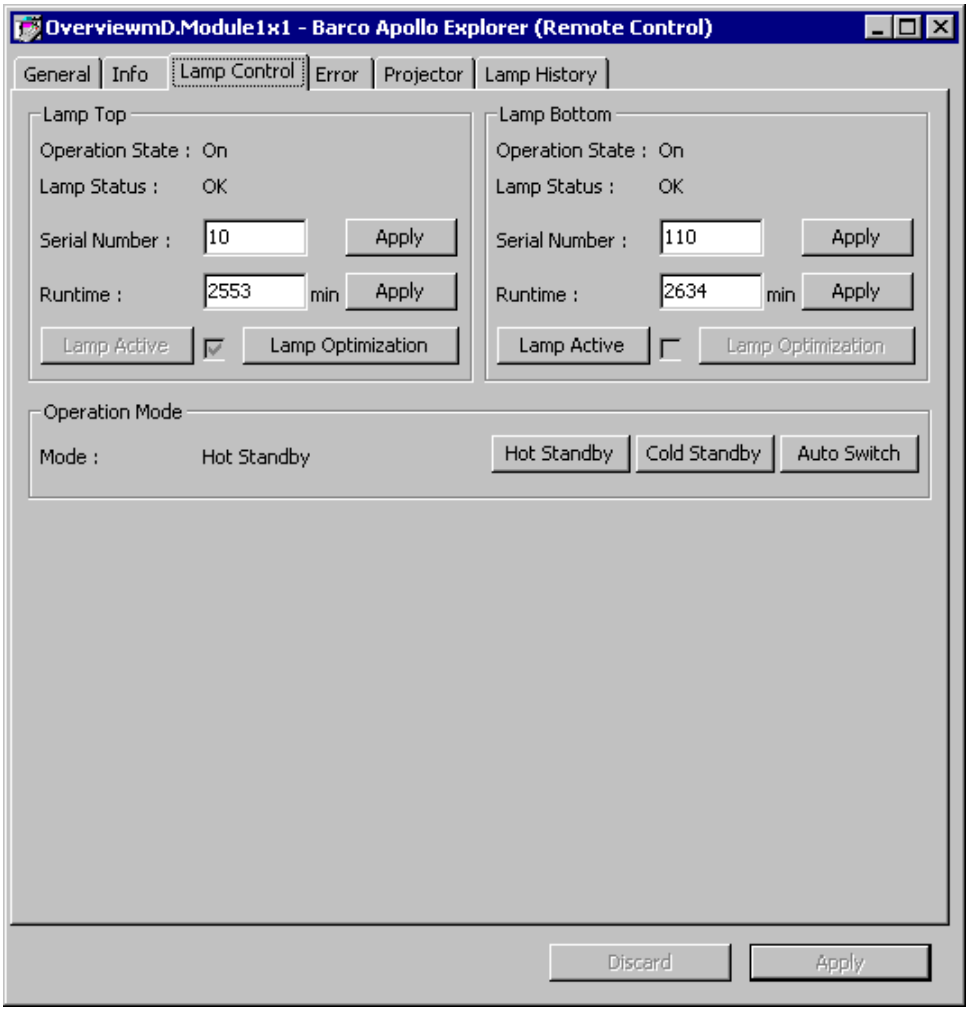
Name	Assigned by Control Room Configurator
Type	OverView D: rear projection system which projector is based on DLP technology
Device State	Gives information if the device can be addressed by the SNMP Agent
Description	Displays the designation for the type of module entered into the Control Room Configurator

7.11.8.2 Info



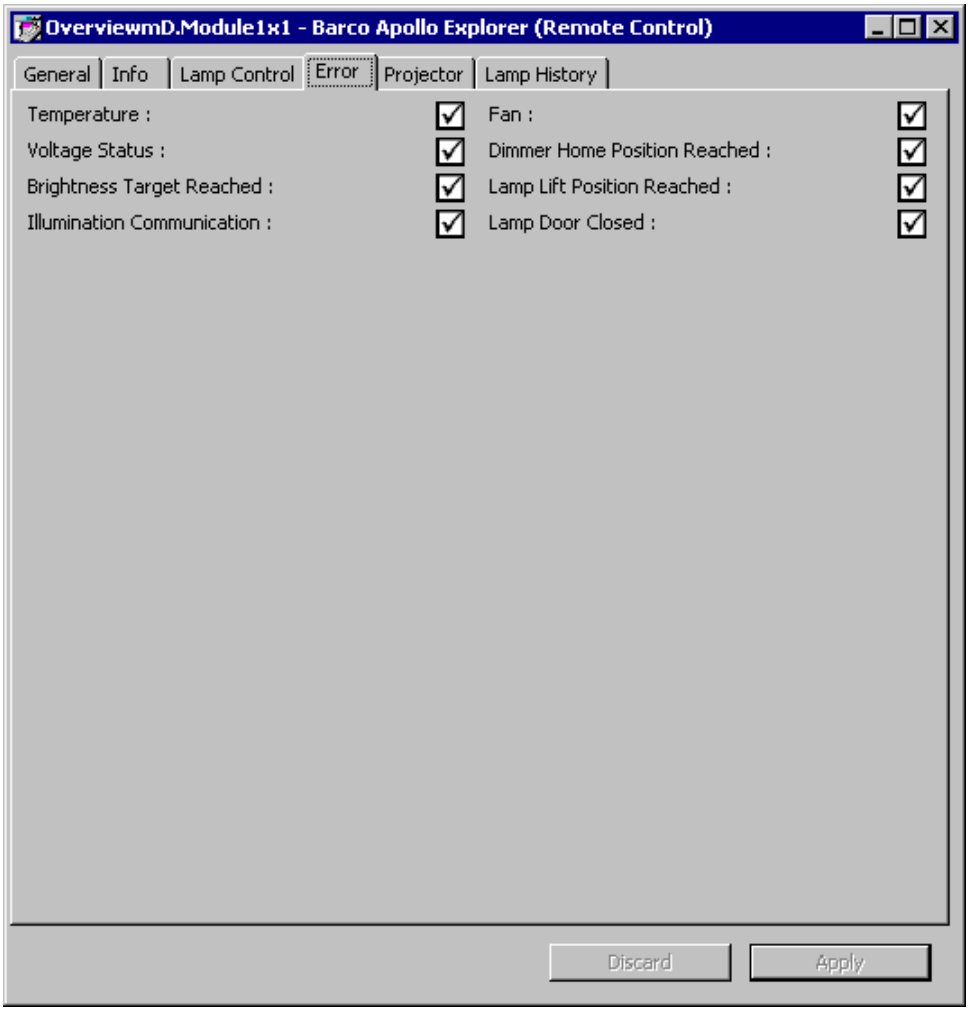
Device Status	Informs about the current operating state of the device
Info Startup	Informs when the SNMP Agent has been launched
Device String	Passes the internal device info about the type of projection module (OverView D)
FirmwareRev	Indicates the Firmware revision
Device Ident	worldwide unique identifier of the device
Projector Runtime	Displays the runtime of the projector
Info Version	Informs about the SNMP Agent (type and version)
Projection Unit Serial Number	Displays the serial number of the projector
Illumination Unit Serial Number	Displays the serial number of the projector
Address	Indicates the projector address
Row	Indicates the row of the Display Wall where the projector is installed
Column	Indicates the column of the Display Wall where the projector is installed
Lamp Hot Standby Mode Released	Indicates whether the projector is allowed to be operated in hot standby mode
General Device State	Indicates whether the device is ok. If it is not ok, please see the **Error** tab

7.11.8.3 Lamp Control



Operation State	Shows whether the lamp is switched on or off.
Lamp Status	Informs about lamp state On-OnWait-Off-OffWait.
Serial Number	Set the Serial Number of a new lamp by entering the data into the field and pressing **Apply.**
Runtime	Set the Runtime of a new lamp by entering the data into the field and pressing **Apply.**
Lamp Active	Informs whether this lamp is the active lamp (illuminating the optics). In case of the active lamp, the button is disabled, and the checkbox is ticked. To select the other lamp as active lamp, click on the corresponding **Lamp Active** button!
Lamp Optimization	Run this procedure whenever a lamp has been replaced. This procedure optimizes the mirror position and thus the available amount of light.
Hot Standby	Click on **Hot Standby** to activate the **Hot Standby** operation mode (only available if **Hot Standby** has been released).
Cold Standby	Click on **Cold Standby** to activate the **Cold Standby** operation mode
AutoSwitch	Click on **AutoSwitch** to activate the **AutoSwitch** operation mode

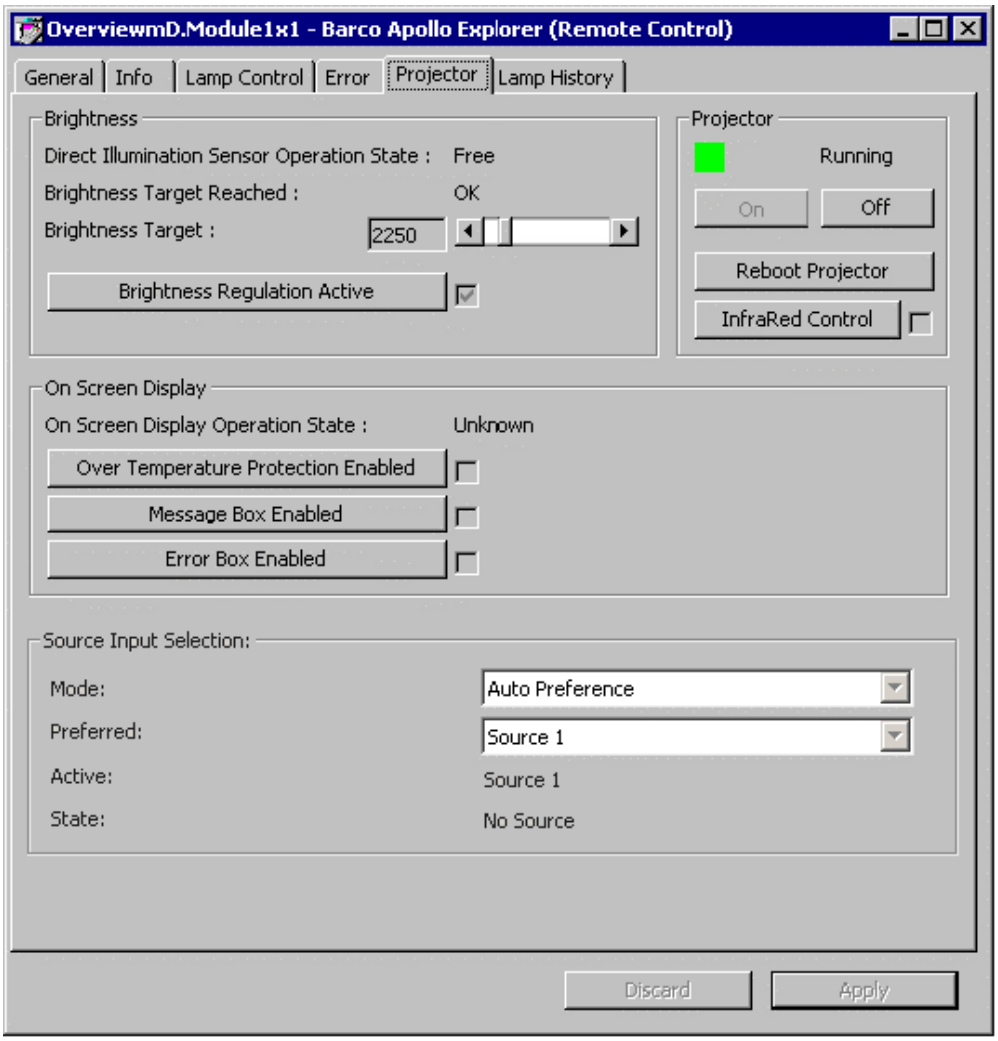
7.11.8.4 Error



This tab informs about some operating conditions. If the checkboxes are ticked, everything is ok.

Temperature	Ticked: Temperature below the temperature limit
Voltage Status	Ticked: Voltage ok
Brightness Target Reached	Ticked: the pre-defined brightness target of the Display Wall is reached by this projector
Illumination Communication	Ticked: Communication between projection unit and illumination unit is ok.
Fan:	Ticked: both fans are working
Dimmer home position reached	Ticked: dimmer initialization was ok
Lamp lift position reached	Ticked: lamp lift has reached its position (up or down)
Lamp Door closed	Ticked: the lamp door is closed.

7.11.8.5 Projector

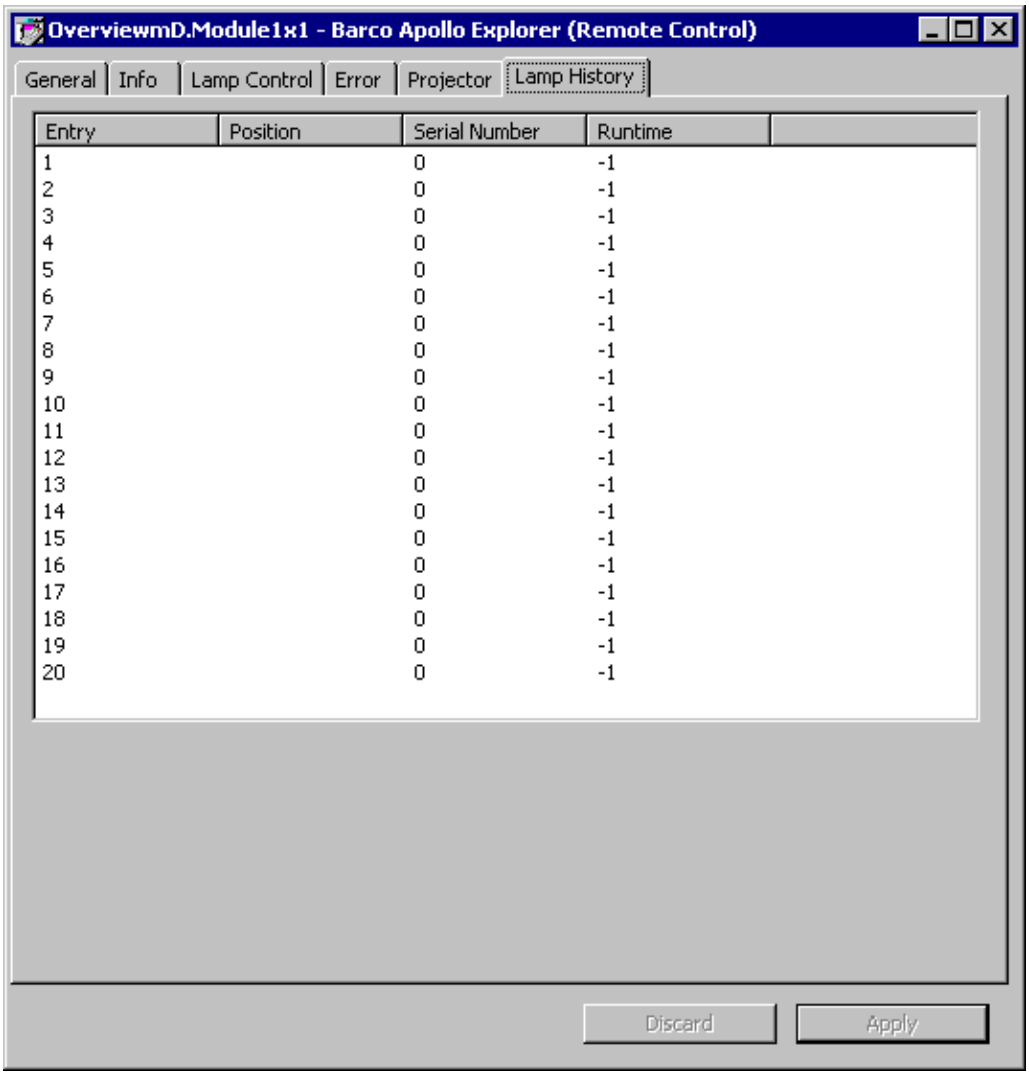


This tab informs about brightness, OnScreen Display und Source Input Selection (firmware 3.x only).

Direct Illumination Sensor Operation State	Indicates whether the DIS sensor is busy or free
Brightness Target Reached	The pre-defined brightness target of the Display Wall is reached by this projector
Brightness Target	Modify or check the value of the Brightness Target. To use the brightness target, in case the display wall is controlled by the OCM, the automatic brightness regulation of the OCM has to be switched off!
Brightness Regulation Active	Modify or check the Brightness Regulation (Lumens lock mode). Is always switched on (also in case the display wall is controlled by the OCM)
Projector On / Off	Switch the main power of the projector on or off. A green square indicates that the projector is running.
Reboot Projector	If Firmware upgrade has been performed, the projector has to be reset Click on this button the start the rebooting
InfraRed Control	Enable or disable controlling the projector with the IR Remote-Control Unit.
Over Temperature Protection Enabled	Set or check the behavior of the projectors when the temperature limit is reached. Recommended: enabled. If enabled, the projector shuts down if the temperature is too high (otherwise the systems might be damaged!)
Message Box Enabled	Set or check if message boxes are displayed (overlaying the application) or not

Error Box Enabled	Set or check if error boxes are displayed (overlaying the application) or not
Mode	Allows to select one of the following operation modes: Manual Auto Preference Auto Switch
Preferred	Allows the set the preferred input, source 1 or source 2
Active	Informs about the active input
State	Informs about the state of the active input

7.11.8.6 Lamp History

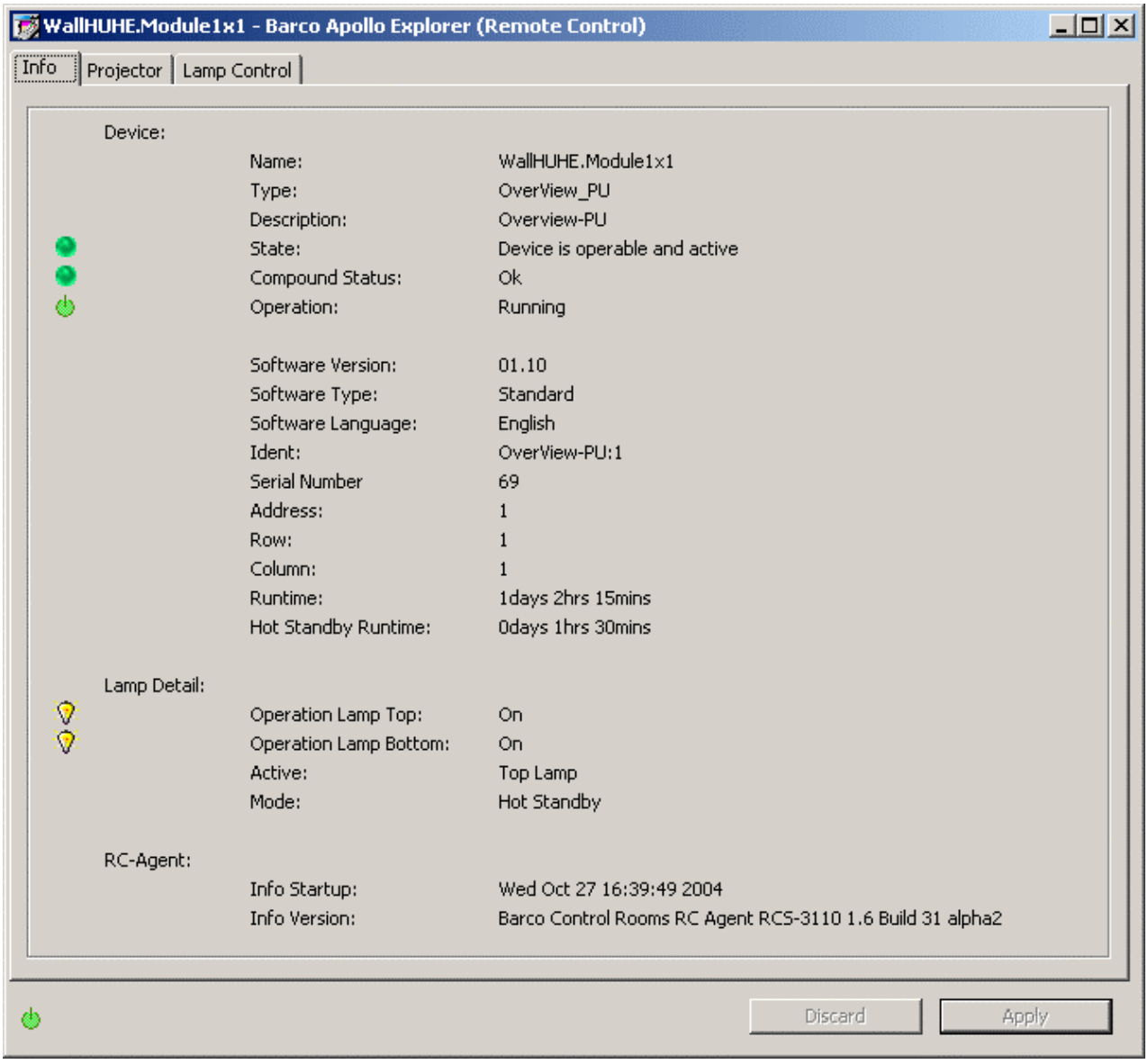


This tab gives an overview about the employed lamps, their position, serial number and runtime.

Entry	Indicates the projector mode: starting/stopping/stopped/running
Position	Indicates if it is Lamp Top or Lamp Bottom
Serial Number	Displays the serial number of the lamp
Runtime	Indicates the operation time of the lamp

7.11.9 OverView cPU67-DL

7.11.9.1 Info

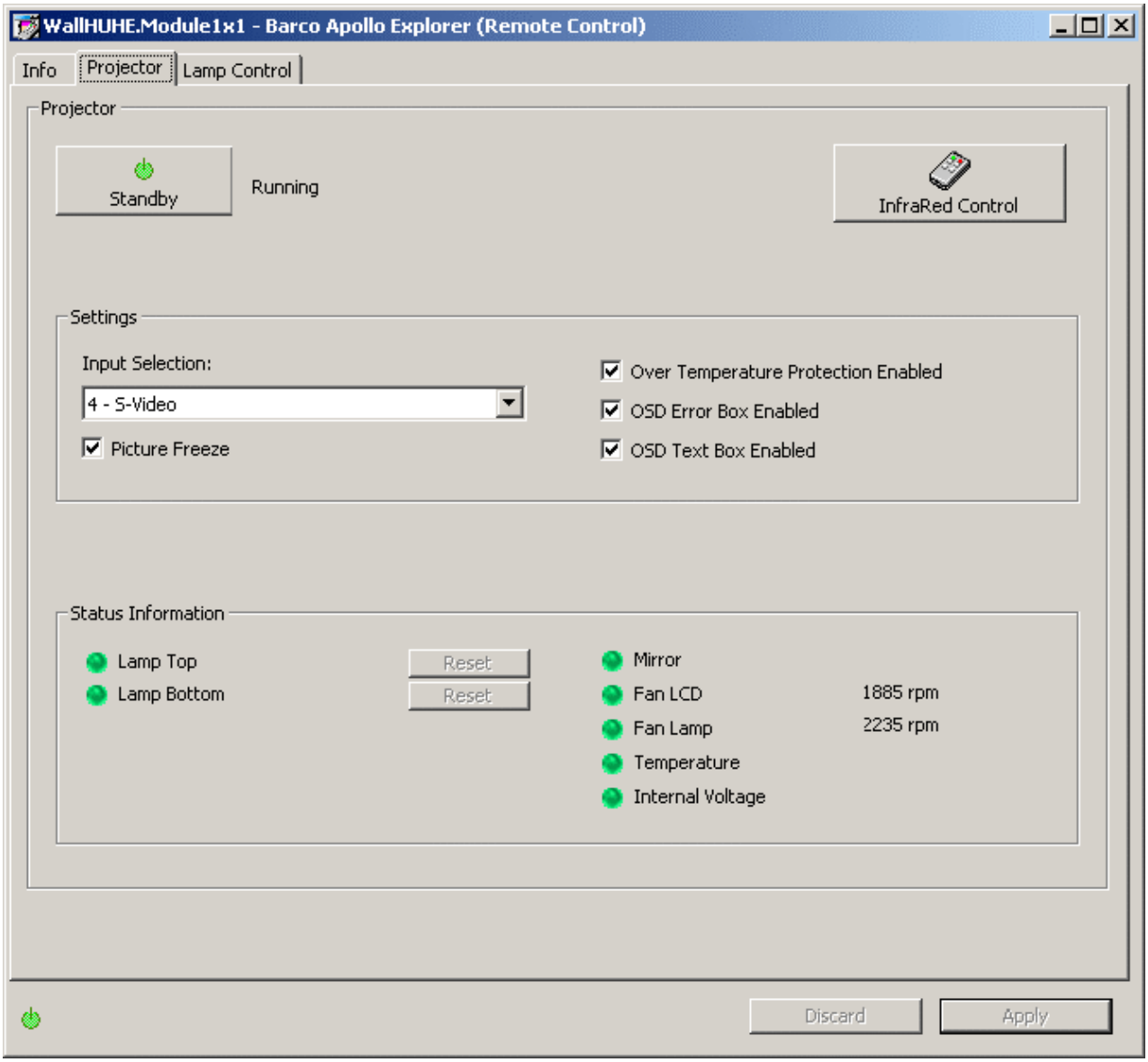


On this tab information about the device are listed.

Name	Assigned by Control Room Configurator
Type	OverView _PU: rear projection system which projector is based on pSi-technology, UXGA resolution
Description	Displays the designation for the type of module entered into the Control Room Configurator
State	Gives information if the device can be addressed by the SNMP Agent
Compound Status	Indicates whether the device is ok. If it is not ok, please see the **Error** tab
Operation	Informs about the current operating state of the device
Software version	Indicates the Firmware revision

Software type	Informs about the software type
Software language	Language of the OSD
Ident	worldwide unique identifier of the device
Serial Number	Displays the serial number of the projection engine
Address	Indicates the projector address
Row	Indicates the row of the Display Wall where the projector is installed
Column	Indicates the column of the Display Wall where the projector is installed
Runtime	Displays the runtime of the projection engine
Hot standby runtime	Indicates the time the projector has been operated in hot standby mode.
Operation Lamp top	Indicates the operation status of lamp top (off/on-wait/on/off-wait)
Operation Lamp bottom	Indicates the operation status of lamp bottom (off/on-wait/on/off-wait)
Active	Indicates the active lamp
Mode	Indicates the operation mode (cold standby, hot standby, autoswitch)
Info Startup	Informs when the SNMP Agent has been launched
Info Version	Informs about the SNMP Agent (type and version)

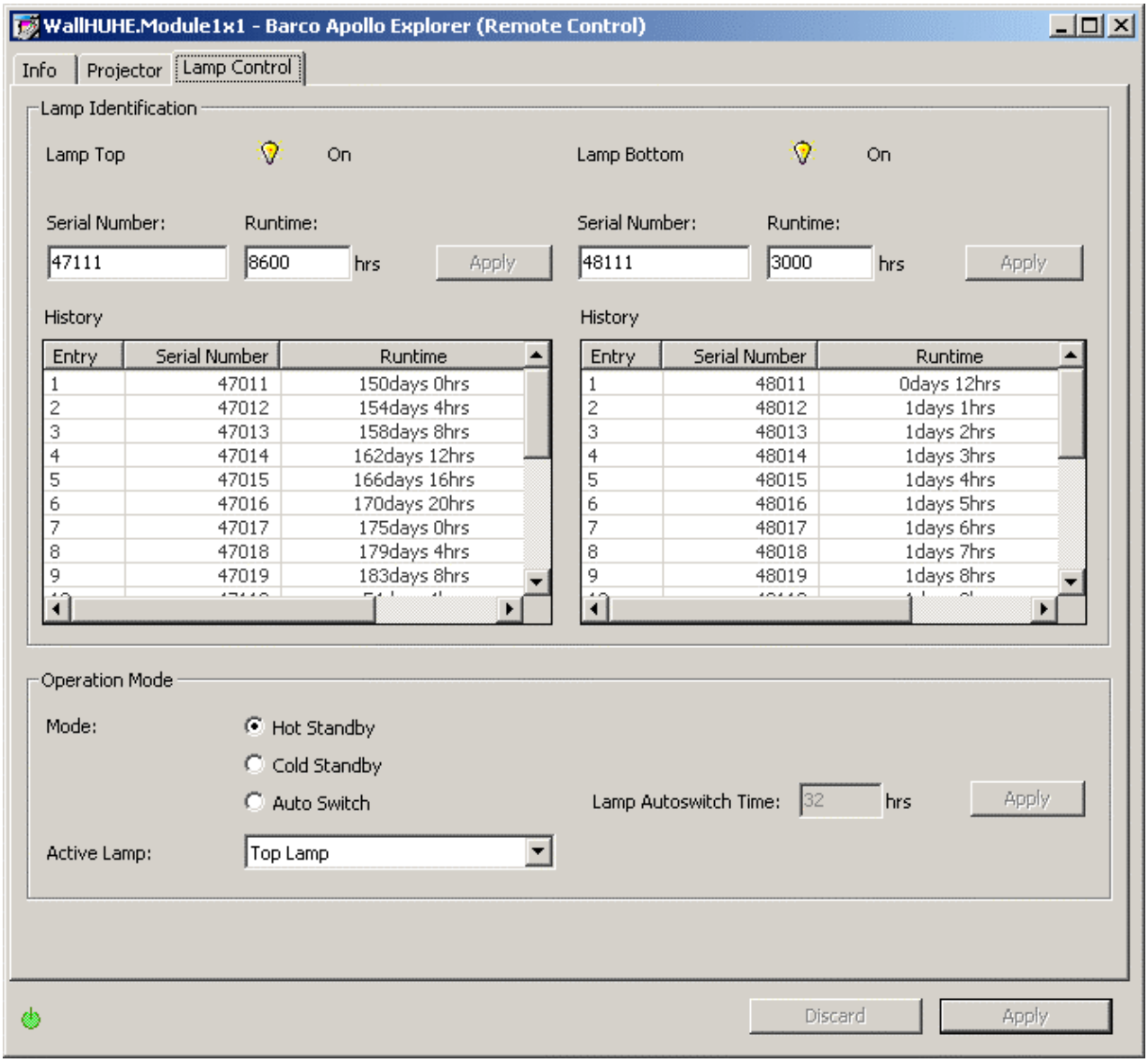
7.11.9.2 Projector



Standby	Press this button to switch the projector from standby to operation or from operation to standby. The current status is indicated next to the button
InfraRed Control	Press this button to display the virtual InfraRed Control
Input Selection	Use this list box to select the desired source.
Picture Freeze	Tick this check box to freeze the picture, clear it to have it running again
Over Temperature Protection Enabled	Tick this check box to activate Over Temperature Protection (recommended!)
OSD Error Box Enabled	Tick this check box to display error boxes (overlaying the application)
OSD Text Box Enable	Tick this check box to display text boxes (overlaying the application)
Status Information Lamp Top	If the icon is green, lamp top is ok. The icon turns red in case of a lamp failure, and the mirror is blocked. If the broken lamp is replaced, reset the error by clicking the Reset button. This also re-

	leases the mirror.
Status Information Lamp Bottom	If the icon is green, lamp bottom is ok. The icon turns red in case of a lamp failure, and the mirror is blocked. If the broken lamp is replaced, reset the error by clicking the Reset button. This also frees the mirror.
Status Information Mirror	A green icon indicates that the mirror is ok
Status Information Fan LCD	A green icon indicates that the fan is ok. The fan speed is also indicated.
Status Information Fan lamp	A green icon indicates that the fan is ok. The fan speed is also indicated.
Status Information Temperature	A green icon indicates that the temperature is ok.
Status Information internal voltage	A green icon indicates that the internal voltage is ok.

7.11.9.3 Lamp Control



This tab gives detail information about the lamps.

If a lamp is running, the lamp icon is depicted yellow. If the lamp is not running (cold standby, auto switch mode), the icon is grey.

Serial number and runtime of the current lamp top and lamp bottom can be viewed and set. To change the values, edit them and click on the **Apply** button. **History** shows serial number and runtimes of all lamps in the past and the current lamp. The list comprises up to 20 entries. In case the number exceeds this limit, entries are deleted, starting with the lowest orders numbers (**Entry** column). In addition lamp operation mode can be set and specified and the active lamp be selected.

Serial Number	Set the Serial Number of a new lamp by entering the data into the field and pressing **Apply.**
Runtime	Set the Runtime of a new lamp by entering the data into the field and pressing **Apply.**
History	Shows serial number and runtimes of all lamps in the past and the current lamp. The list comprises up to XXX entries. In case the number exceeds this limit, entries are deleted, starting with the lowest orders numbers (**Entry** column)
Hot Standby	Click on **Hot Standby** to activate the **Hot Standby** operation mode (only available if **Hot Standby** has been released).
Cold Standby	Click on **Cold Standby** to activate the **Cold Standby** operation mode
Auto Switch	Click on **AutoSwitch** to activate the **AutoSwitch** operation mode
Lamp AutoSwitch time	If Auto Switch mode is selected, the autoswitch time can be set in the range between 12 and 500 hours. Click the **Apply** button to assign the values.
Active lamp	If Auto Switch mode is selected, the autoswitch time can be set in the range between 12 and 500 hours. Click the **Apply** button to assign the values.

7.11.9.4 InfraRed Control

The device can be controlled via an infrared remote control. Click on the **InfraRed** button to display a 1:1 image of the **IR remote control**. The following settings are possible

Adj Key	Start or end of the setting mode.
Exit Key	Jumping to previous branch of the setting mode menu tree or exiting the setting mode altogether.
Enter Key	Starting the setting mode as well as confirmation of a settings or selection during the setting mode.
Cursor Keys	Select menus in the setting mode and correct settings requiring continuous adjustment.
Standby Key	Activates and deactivates the projector if the power of the projector has been turned on with the projector's ON switch.
Numeric Keys 1-9	Direct access selection; use to enter the address of a projector.
Brightness, Contrast	Set image properties as desired. Push on **-** to reduce, on **+** to increase the set value.

Use **InfraRed Control** to gain access to the setting mode and with that to all menus to modify the source parameters, image and sound settings, as well as the geometric setting. The setting mode is described in detail in the user manual of the device.

7.12 Explorer Context Menu

Click on an object in the **workspace** with the right mouse button to open the **context menu** of the object.

Mini windows feature a context menu as well!

The context menu is expandable, e.g., sources can be accessed via the **viewer context menu**, or the command **Lamp On** can be added in the **projector's context menu**.

One command can be sent to several recipients at once with the context menu since the object list boxes in the workspace allow **multiple selections**.

Press SHIFT to highlight several objects at once.

Press CTRL to select several objects at different positions.

The context menu of a multiple selection contains those commands shared by all selected objects as long as the commands allow multiple selections.

An attribute applied when defining the command specifies whether a command allows multiple selections or not.

7.12.1 Adding commands to the context menu

Edit the ApolloExplorer.ini file located in the Apollo Project directory in the subfolder Server Data to customize the context menu.

A file in the Server Data subdirectory is available to all computers of the Apollo network.

This file also overwrites other files with the same name located in other Apollo Project directories.

Follow these steps to customize the context menu:

- Open the file **...\ApolloProject\ServerData\ApolloExplorer.ini.**

  The comment section of this file explains which syntax to use for a command in the context menu and which attributes can be set.

  The context menu starts a command line. This means that these commands, parameters, and their possible values are the same as those that can be passed via the command interface; cf. Viewer command Interface

  This file lists all devices supported by Apollo. The section for each device starts with the device name in brackets.

- Navigate to the section of the device with the context menu you would like to expand.

  For example, if you want to give access to the command "Blanking" in the context menu of a Web Viewer, and if the image "bluescreen.jpg" is to be displayed in the blanking mode, add the following to the end of the entries for the Web Viewer:

  "Blue" = <cmd>"%ApolloProgram%\ViewerCmd.exe" -name:$ObjectName$ /IdcImage:2 /IdcEnabled: 1 </cmd>

  The context menu now features the entry "Blue."

  This command is now available to all instances of the Web Viewer by clicking with the right mouse button regardless whether one or several instances are selected in the workspace of the viewer.

  Add the attribute **multi** to the command if this command is to apply only if all instances of the Web Viewer are selected:

  "Blue_multi" = <attrib> multi <\attri> <cmd>"%ApolloProgram%\ViewerCmd.exe" -name:$ObjectName$ /IdcImage:2 /IdcEnabled: 1 </cmd>

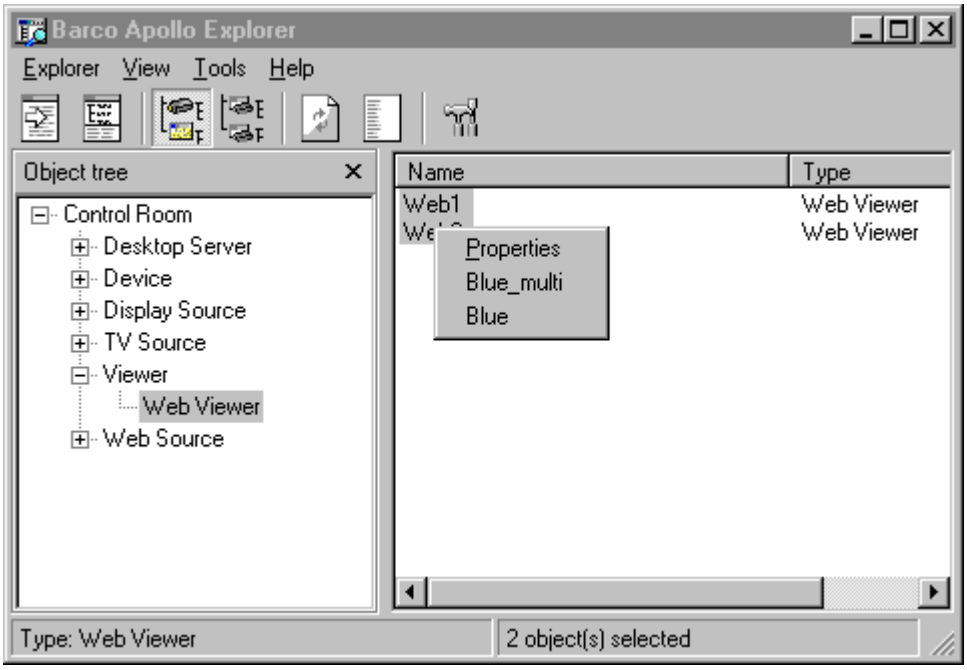
A command with the multi attribute is only available in the context menu with multiple selection.

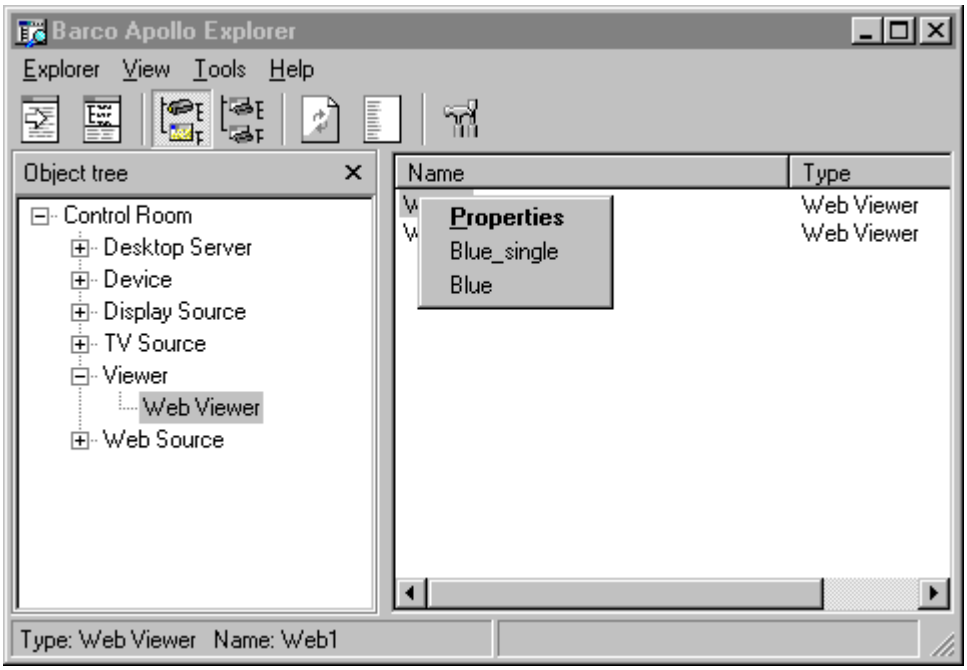
  Add the attribute **single** to the command if this command is to apply only if exactly one instance of the Web Viewer is selected:

  "Blue_single" = <attrib> single <\attri> <cmd>"%ApolloProgram%\ViewerCmd.exe" -name:$ObjectName$ /IdcImage:2 /IdcEnabled: 1 </cmd>

A command with the single attribute is only available in the context menu with single selection.

The multi and single attributes can also be used so execute different commands by context entries with the same name depending on the selection.


Barco Apollo Explorer
Explorer View Tools Help
Object tree
Control Room
Desktop Server
Device
Display Source
TV Source
Viewer
Web Viewer
Web Source
Name
Type
Web1
Web Viewer
Web Viewer
Properties
Blue_multi
Blue
Type: Web Viewer
2 object(s) selected

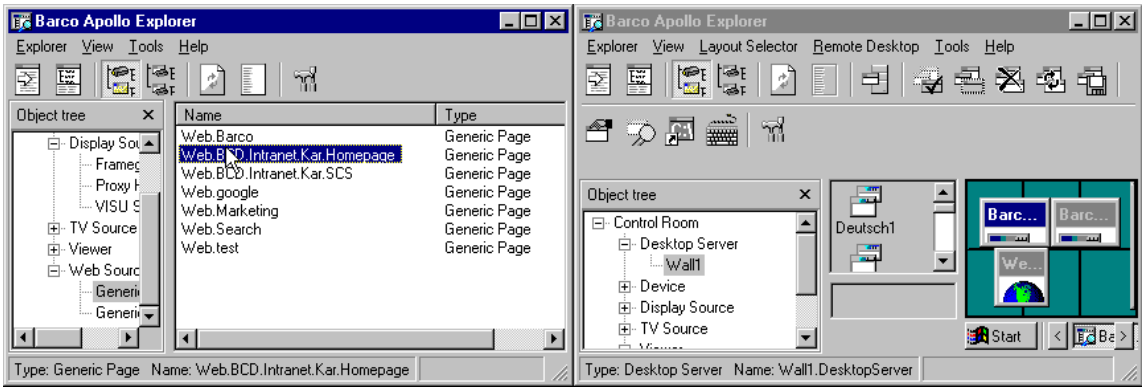

Barco Apollo Explorer
Explorer View Tools Help
Object tree
Control Room
Desktop Server
Device
Display Source
TV Source
Viewer
Web Viewer
Web Source
Name
Type
Web Viewer
Web Viewer
Properties
Blue_single
Blue
Type: Web Viewer Name: Web1

7.13 Drag&Drop functionality

Use the Drag&Drop function to connect launched viewers with a different source without opening the **properties dialog** box.

Assumption: The Apollo Explorer runs in two instances.

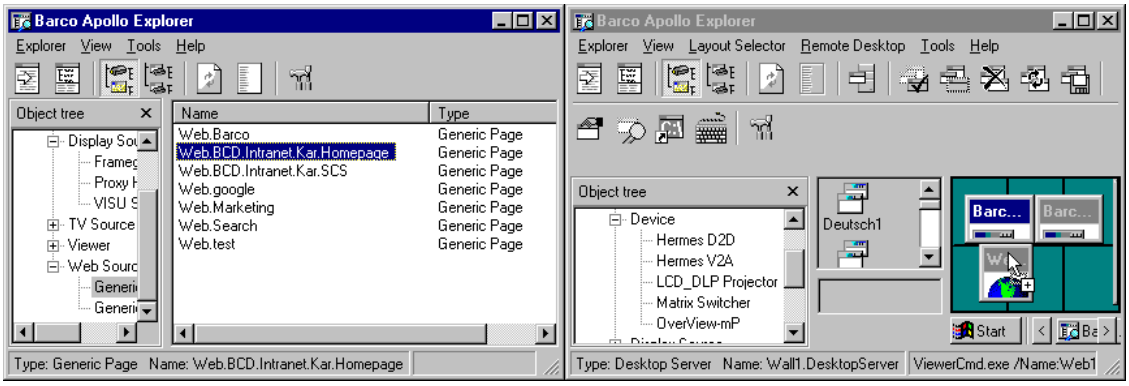
Now you can click on **Web Sources|General Pages** in the **object tree** in one instance of the **Explorer** and on the **Display Wall** in the other instance of the **Explorer**, for example:



Please make sure that the option Show Desktop is selected! (Tools|Options| Remote Desktop)!

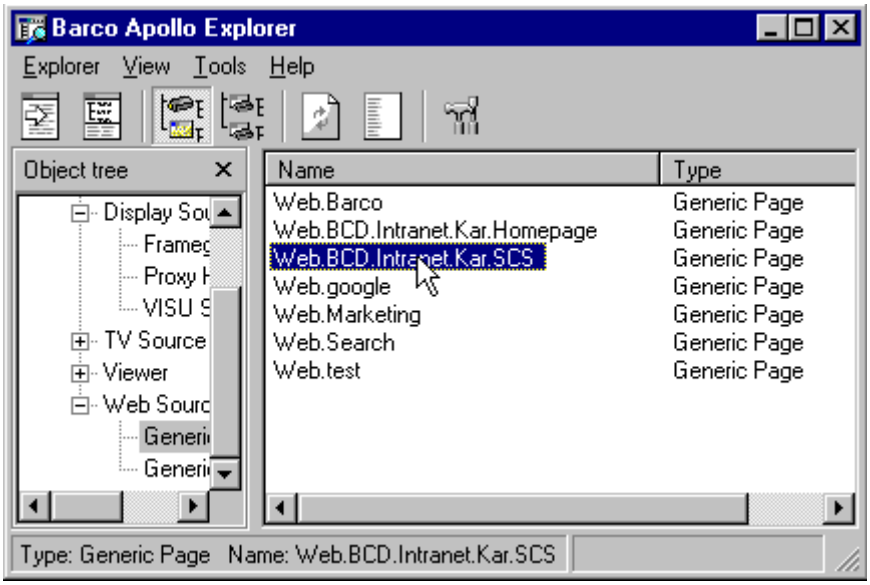
Now use the mouse to drag a Web Source from the workspace of the first Explorer to the mini window of the Web Viewer of the second Explorer. The Web Viewer is now linked with this source.

Please make sure to release the mouse button only when directly in the mini window of the viewer!

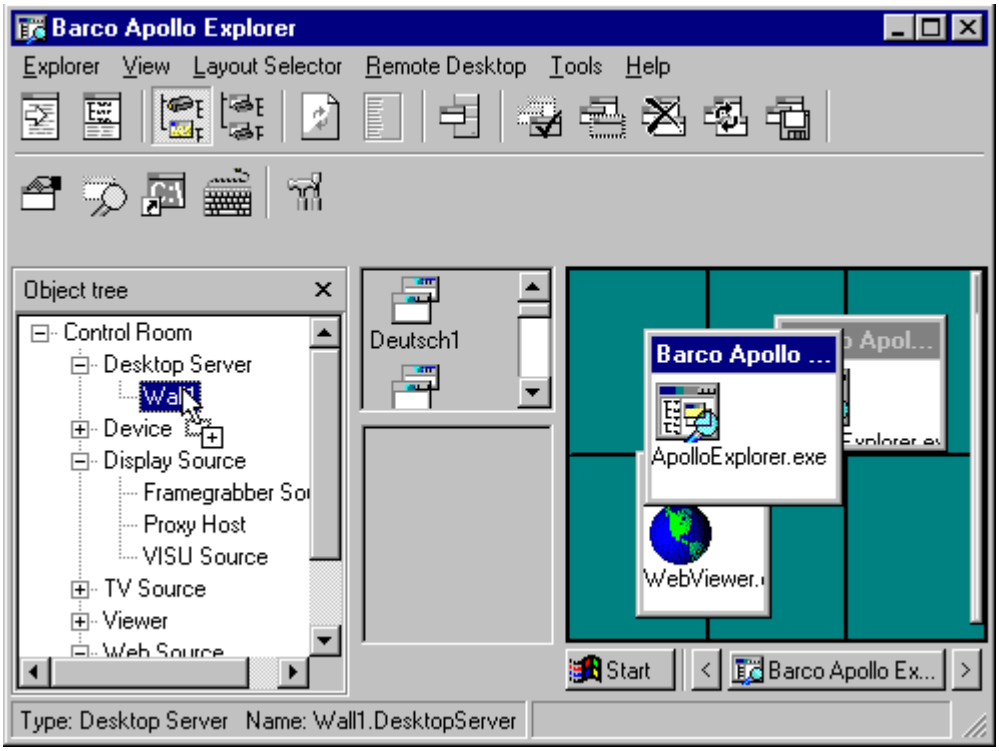


Follow these steps if only one Explorer instance is running:

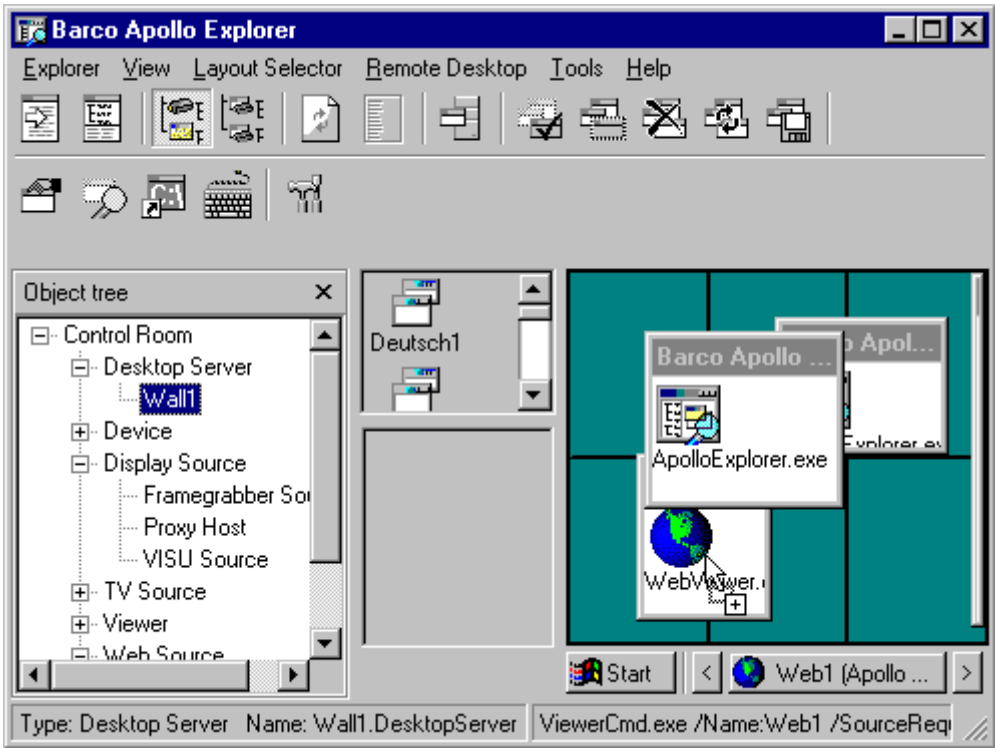
- Click on **Web Source | General Page** in the **object tree**.
- Select a source from the workspace.



- Keep the mouse button depressed and navigate to the Desktop Server in the object tree. The + sign (node) of the Desktop Server expands.
- Keep the mouse button depressed and navigate to the desired Display Wall.



- Keep the mouse button depressed and move the cursor to the mini window of the Remote Desktop Web Viewer.
- Release the mouse button.



To connect the Web Viewer to sources which are not defined in the ServerData\Globals.ini file and which therefore are not available in the workspace of the Explorer, enter the URLs in e.g. Wordpad using the following syntax:

/Type: Viewer_WebViewer /URL:www.anypage.de /SourceConnected

Highlight this line and drag it with the mouse into the mini window of the Apollo Explorer Web Viewer.

The Drag&Drop functionality supports all parameter valid for the respective viewer.

The syntax starts with the type of the viewer, see examples below.

/Type:Viewer_FrgViewer /SourceRequested:Frg.frg4

/Type:Viewer_VISUViewer /SourceRequested:VISU.Video1

/Type:Viewer_CottusViewer /SourceRequested:Desktops.BARCOEUROPE.karclt8s

/Type:Viewer_WebViewer /SourceRequested:Web.Barco

/Type:Viewer_MpegViewer /SourceRequested:MovieServer.YellowPages

/Type:Viewer_VTplusViewer /SourceRequested:TV.Home

/Type:Viewer_VNCViewer /SourceRequested:VNC_desktops.karclt24

/Type:Viewer_ProViewer /SourceRequested:Pro_Desktops.niocIteos

To connect to a source predefined in ServerData\viewersources.ini; the parameter SourceRequested includes all necessary information.

To connect to non-predefined sources, the respective parameters for this source have to be entered (e.g. URL, hostname etc.) followed by the parameter **SourceConnected** to make the viewer instance connecting to the source.

The Drag&Drop function is very useful, e.g., for GIS applications where you can drag the camera icon into the mini window of the Web Viewer to view camera data.

8 Layout Editor

The **Layout Editor** is used to specify regions and to create and modify so-called layouts. Regions define rectangular areas on the Display Wall. Layouts usually consist of several windows and define which windows are to be loaded in which position using what size.

Every layout is saved in a database using a unique name. Every Display Wall has its own database located on the associated control computer or on any other network computer.

This release of Apollo shows the region functionality only if explicitly selected.

When converting existing databases, the option Use Region in the Database convertor has to be checked

When creating new databases, the option Use Region has to be checked in the menu Properties|Display Wall.

8.1 Layout database

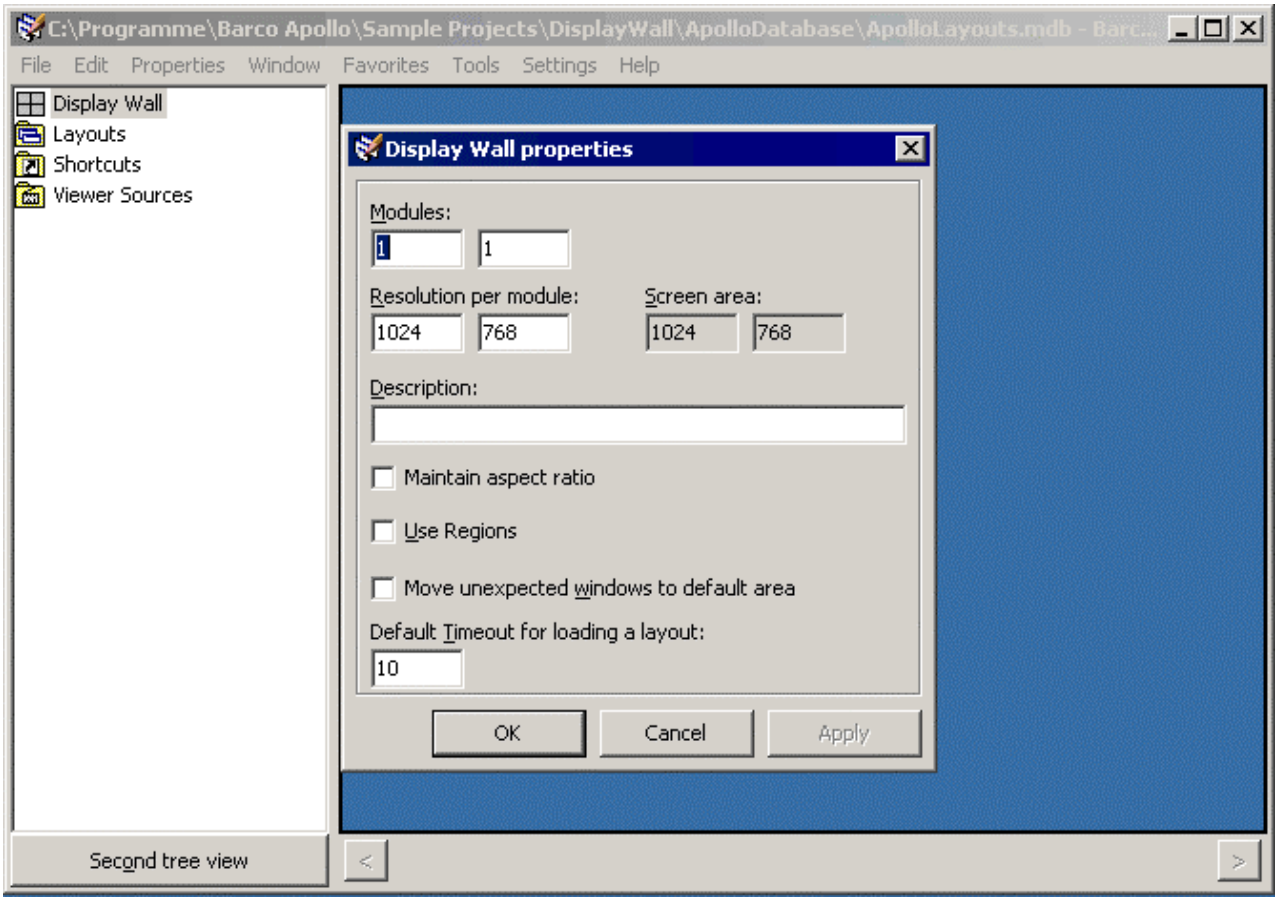
The **Layout Editor** is used to specify regions on the Display Wall and to create and modify so-called layouts.

8.1.1 Regions

A region is a rectangular area on the Display Wall. A Display Wall has at least one region (= entire Display Wall). Multiple regions can be defined, which can be overlapping. In contrast to previous versions of Apollo, now a layout no longer is defined for the Display Wall, but for the specified region(s), thus enabling the reuse of layouts at different locations on the Display Wall.

The concept of regions allows assigning individual **permissions** to access user groups. Multiple access user groups can simultaneously have access to one region (and thus to the layouts/applications of this regions). By means of well-defined permissions, the interactions of various users become coordinated.

For defining regions, select Use Regions in the Properties Menu (Properties|Display Wall). After applying this selection, Regions are added to the tree view of the Layout Editor.



In case a layout is in in auto load mode the option "Use Region" cannot be changed!

8.1.2 Layouts

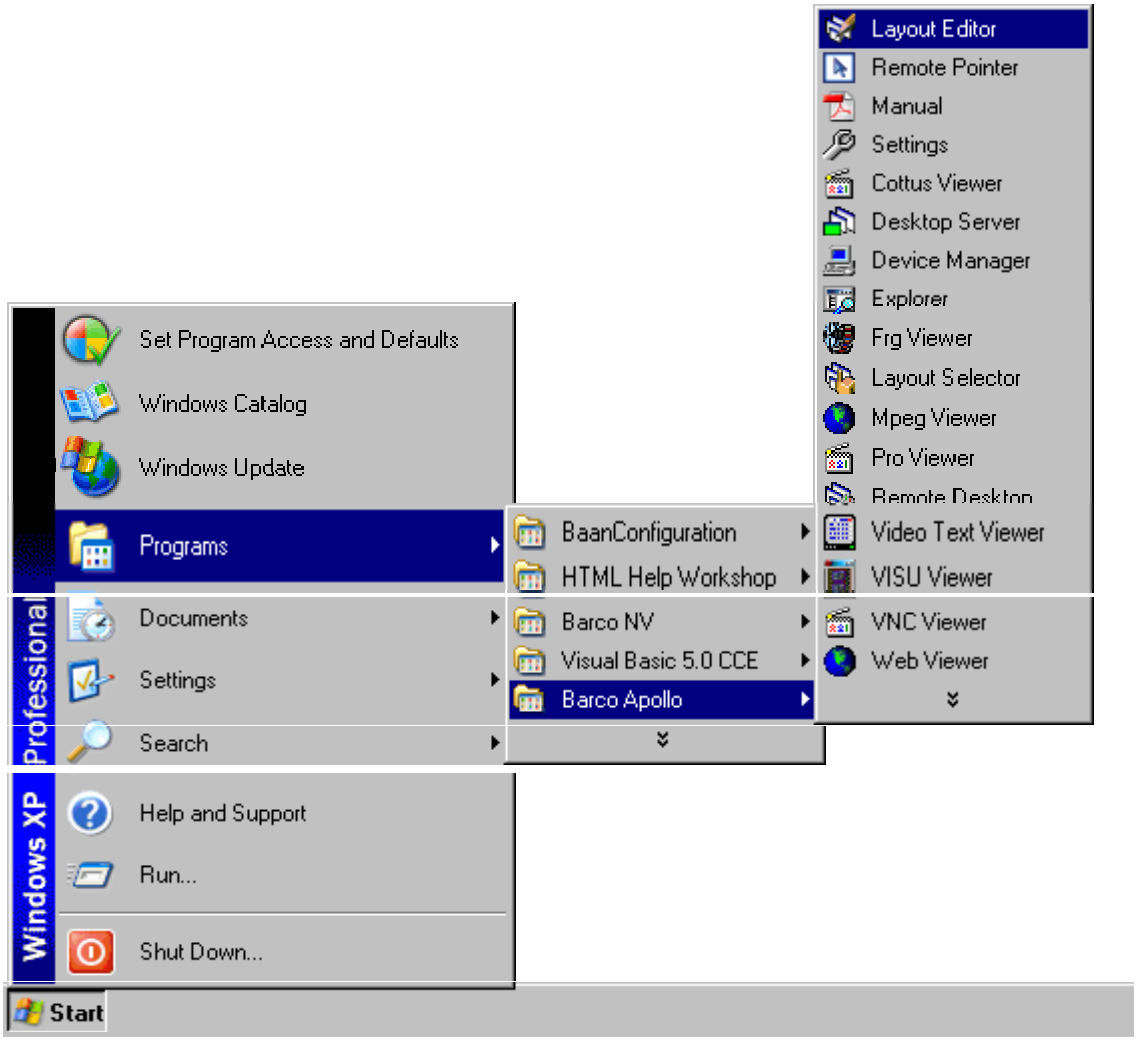
Layouts consist of several windows and/or shortcuts and define window size and position of any active window in one ore more regions. Every layout is saved in a database using a unique name. Every Display Wall has its own database located on the associated control computer or any other network computer.

Layouts can be edited in the **Layout Editor** or interactively on the Display Wall (**Remote Desktop**). Provided the respective permissions are given, several users can access the layout database simultaneously but only one user can edit the database. The first user locks the database so that subsequent users cannot make changes while the database is in use.

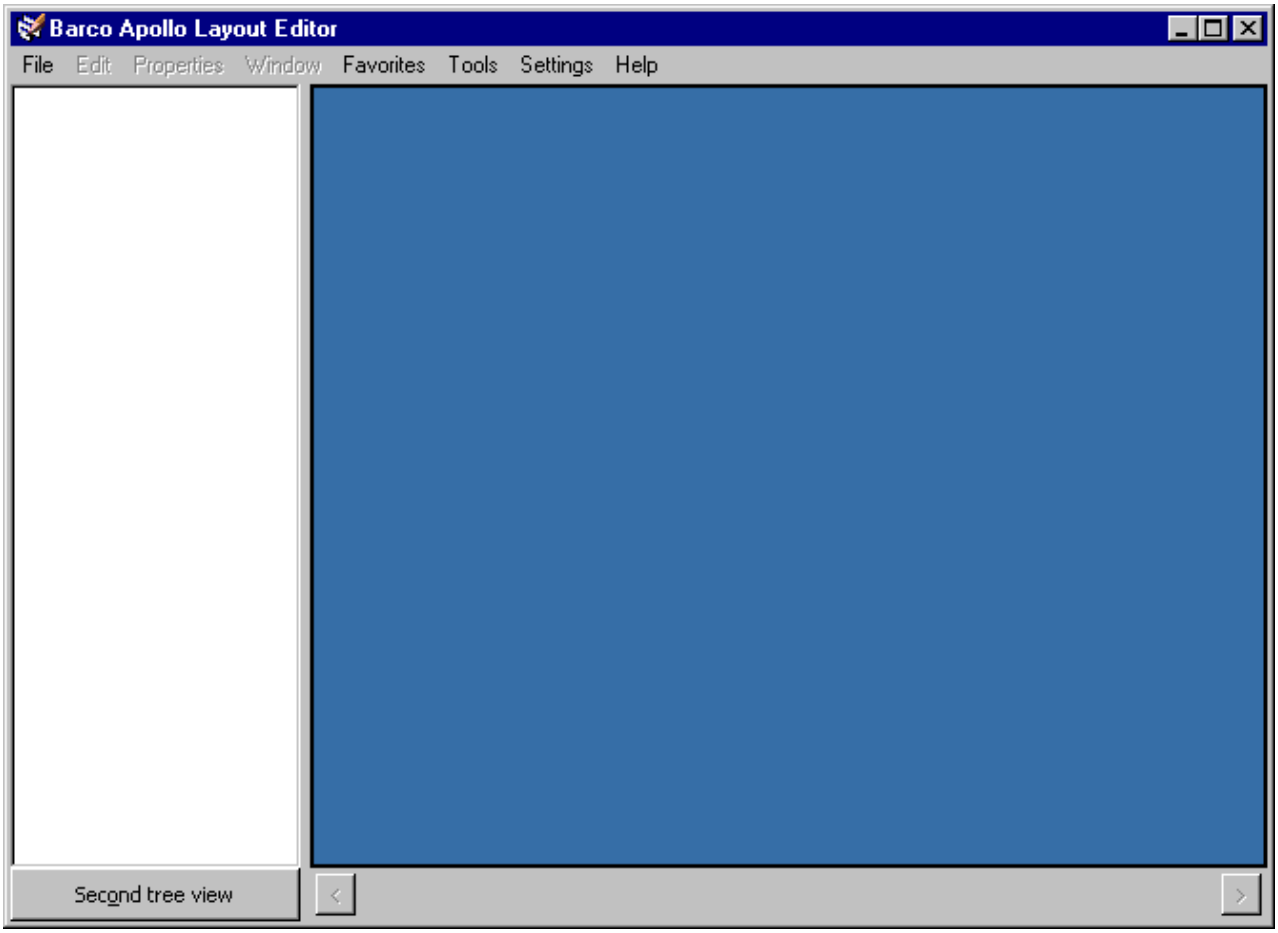
8.2 Launching the Layout Editor

Launch the program using the shortcut

Start|Programme|Barco Apollo|Layout Editor



The main window of the **Layout Editor** is displayed:



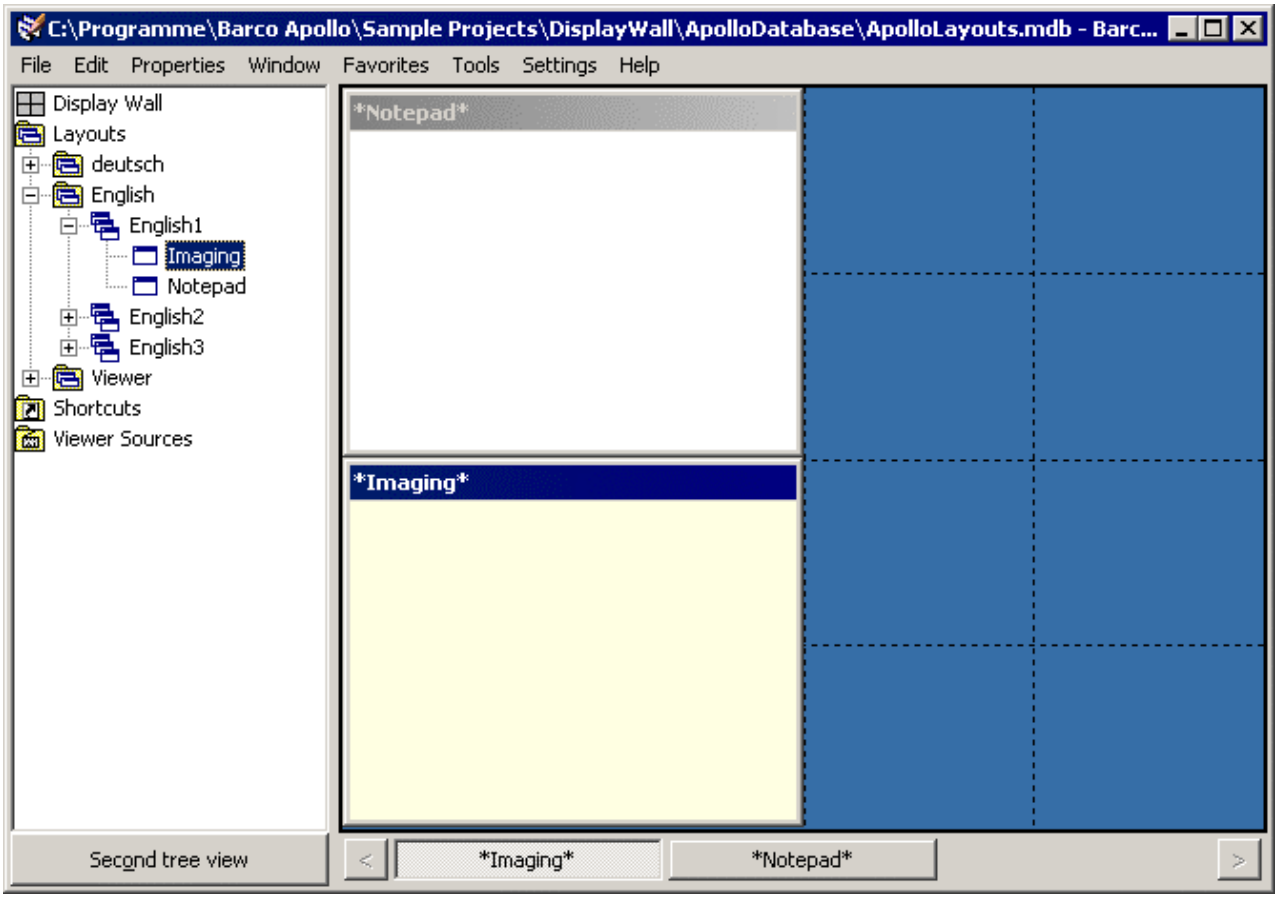
The menu bar of the **Layout Editor** contains the entries **File**, **Edit**, **Properties**, **Windows** , **Favorites**, **Tools**, **Settings**, and **Help**.

A tree structure in the left pane of the **Layout Editor** is used to display the layouts, shortcuts and regions defined in an opened database.

The **Tree View** depicts the windows and shortcuts defined in a layout as well as the associated windows in the right pane (**Desktop**) according to their properties.

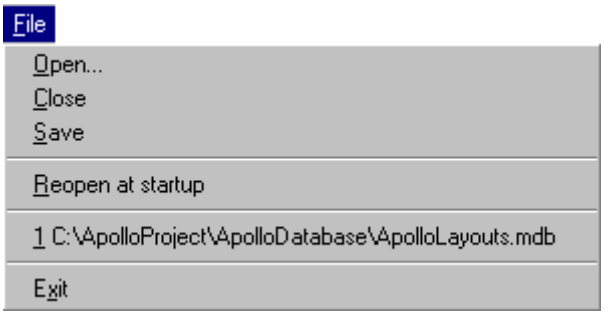
Every window defined in the layout is represented in the **Task bar** with an icon.

A second treeview can be launched to conveniently copy and past items (e.g. windows into a layout) via drag and drop.


C:\Programme\Barco Apollo\Sample Projects\DisplayWall\ApolloDatabase\ApolloLayouts.mdb - Barc...
File
Edit
Properties
Window
Favorites
Tools
Settings
Help
Display Wall
Layouts
deutsch
English
English1
Imaging
Notepad
English2
English3
Viewer
Shortcuts
Viewer Sources
Notepad
Imaging
Second tree view
<
Imaging
Notepad
>

8.3 Layout Editor menus

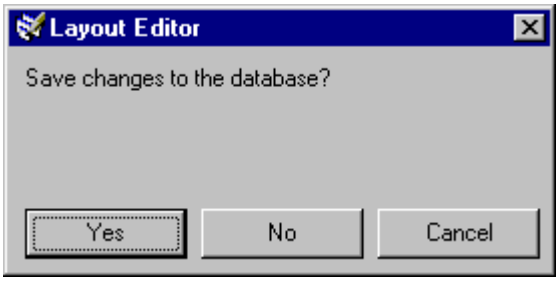
8.3.1 File menu



Use the **Open** command to search for an open an Apollo database within the network. Select **Reopen at startup** to automatically open the same database next time you start the **Layout Editor**. The last 4 opened databases are displayed as MRU entries (**M**ost **R**ecently **U**sed) in the file menu and can be opened from there.

Use the **Save** command to save any database modifications. Saving a database means the original database without the changes is saved first in the same directory under the name ApolloDatabase.mdb.back. You can thus restore the original file by closing the database, deleting it, and then renaming the saved backup copy. Use **Exit** to close the database and the **Layout Editor**.

Any unsaved layout or shortcut changes can be saved when closing the file by responding accordingly when using **File|Close** or **File|Exit**:



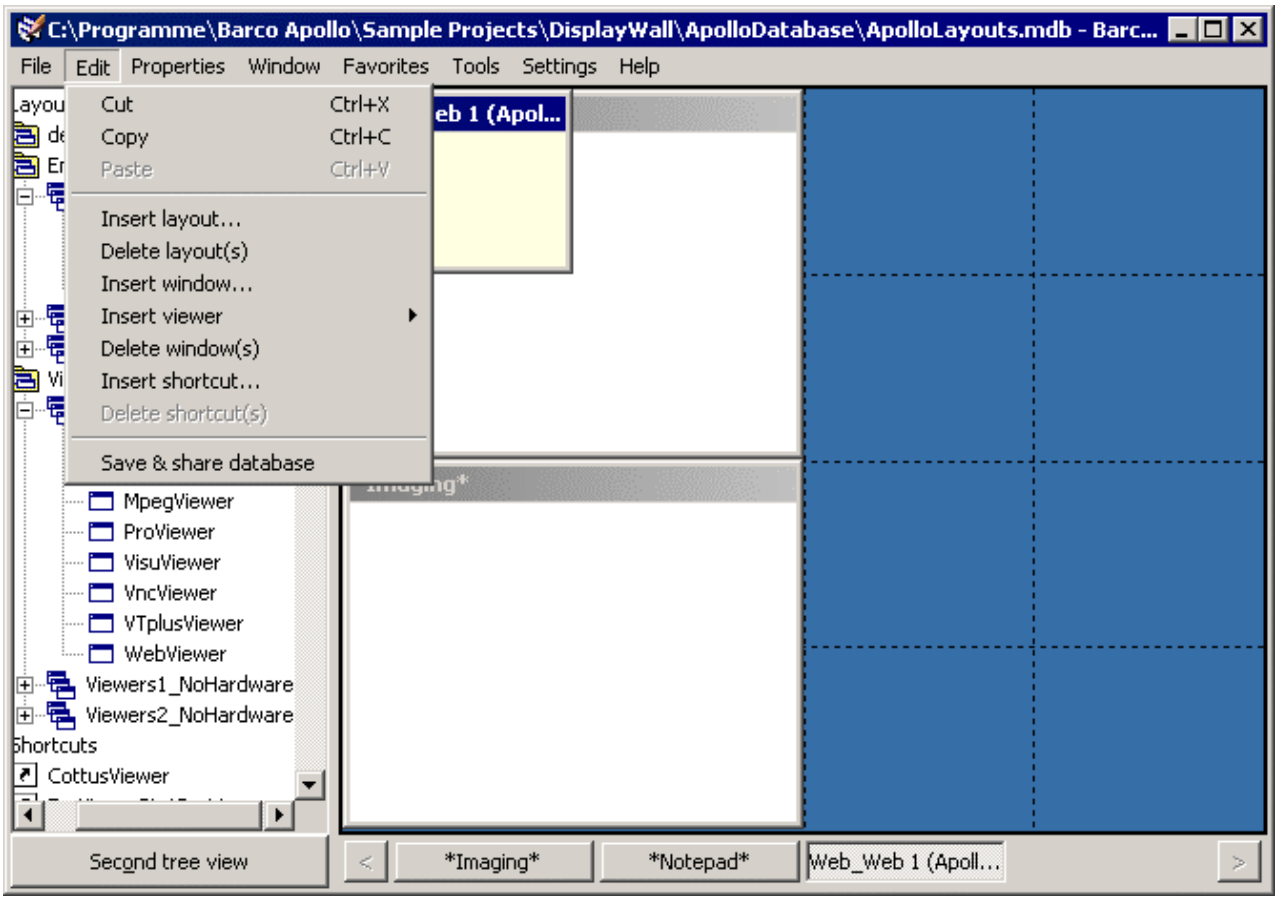
Click on **Yes** to save changes or on **No** to close/exit without saving changes. The database is then closed.

Click on **Cancel** if the database should remain open**.**

8.3.2 Edit menu

The commands are also available via the context menu and can be executed via the known window shortcuts. The following shortcuts are supported:

CTRL+X , CTRL+C, CTRL+V, CTRL+INS, SHIFT+INS, SHIFT+DEL (cut, copy, paste, copy, paste, cut)



The **Edit** menu features the commands **Cut**, **Copy**, and **Paste**. Use these commands to copy complete layouts or individual windows of a layout and paste them to the Tree View or a different layout. The selected command always applies to the currently selected object (layout, window, shortcut, region). Use the commands **Insert layout**, **Insert window**, **Insert viewer, Insert shortcut or Insert region** to add a layout, window, viewer, shortcut, or region. Creating new objects triggers the associated property dialog, which may also be called via the corresponding command in the **Properties** menu.

Regions are only available if the option Use Region is set (Properties|Display Wall|Use Regions)

A convenient method to create new layouts or to modify existing layouts is provided by the second tree view which allows to insert the desired items via drag&drop.

Use the **Delete Layout(s)** command to delete the selected layout from the database. The **Delete Window(s)** command removes the selected window from the layout.

A layout or a region cannot be deleted from the database while it belongs to the list of autoloaded layouts!

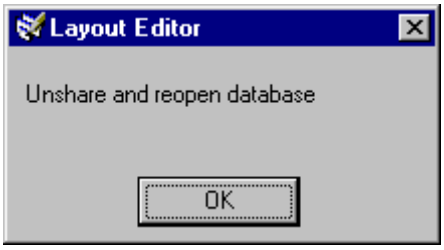
Use **Delete Shortcut** to remove a shortcut. Please note:

- A shortcut can always be removed from a layout
- A shortcut can always be removed from a window
- A shortcut can only be deleted from the database if not required by any of the defined layouts or windows.

Use the **Delete region** command to delete the selected region. This command won't delete the layouts assigned to this region, but of course these layouts no longer can be loaded. To make further use of them, assign them to a different region!

If regions are defined, then layouts can only be loaded into a region!

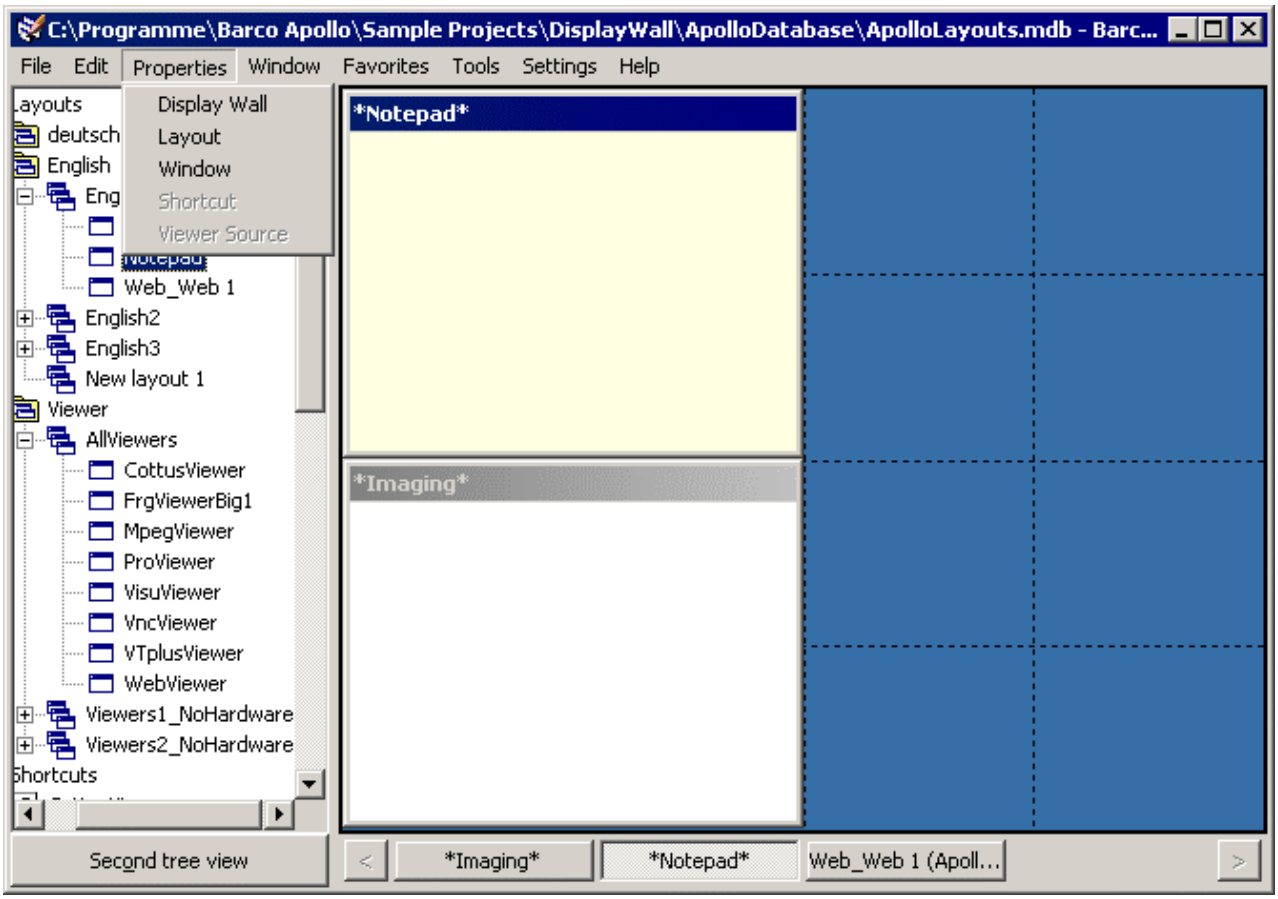
Save & and share database saves changes in the database and then shares this database so that other **Layout Editors**, the **Desktop Server,** or the **Remote Desktop** can save their changes in the layout located in the database. The desktop turns black and the following dialog is displayed:



The other Apollo application has write access to the database as long as this dialog is active. Confirming this dialog with **OK** ends the release of the database to other applications and the database is reloaded. The desktop color changes back to system color set for the desktop.

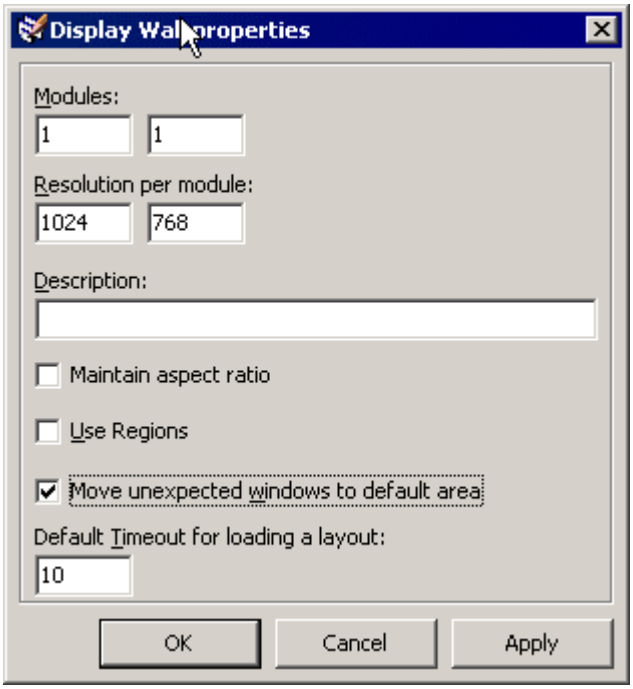
Example: When manipulating layouts or windows directly on the Display Wall, these modifications can only be saved by the **Desktop Server** after the layout database has been unlocked and shared by means of the command **Save and share database**.

8.3.3 Properties menu



You can define properties for the entire Display Wall as well as for a layout, a window of a layout, a shortcut, a viewer source, a region, the Default Area. Only those items are listed in the properties menu which exist in the database. So if e.g. no default area is used and defined, the properties menu won't show this entry.

8.3.3.1 Display Wall properties



Use the **Properties|Display Wall** menu to enter the module configuration and the resolution of the Display Wall. These properties are required only within the **Layout Editor** module. They do not have any impact on the Display Wall when a layout is loaded. Enter any description of the Display Wall in the respective field

Check **Maintain aspect ratio** to have a the actual ratio of the module configuration reflected in the ratio of the desktop of the **Layout Editor**. To ensure a constant ratio, when resizing the window of the **Layout Editor** gray borders might occur.

Check **Use Regions** to organize the entire Desktop in multiple **regions** with e.g. restricted permissions.

If the option Use Regions is set, in addition to the layouts and shortcuts the tree view will show regions as well.

If this option is not set, regions are hidden.

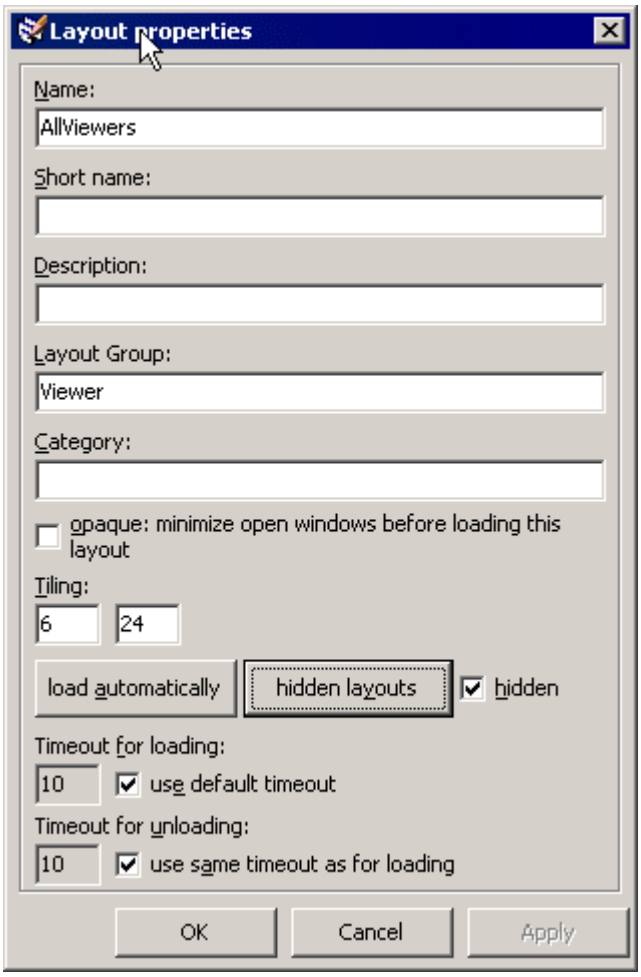
This option cannot be changed, if a layout is in autoload mode.

Furthermore you can select where unexpected windows are positioned. To prevent them from overlaying the application, a dedicated area for unexpected windows can be defined and where these windows are moved to. Check the option **Move unexpected windows to default area**.

The location of the default area and the arrangement of the unexpected windows in this area is defined via the Default Area properties.

As soon as the option to move unexpected windows to default area is set, the tree view is enhanced by the entry "Default area".

8.3.3.2 Layout properties



Enter the **Name**, **Short Name** and **Description** for a new layout or edit these parameters for an existing layout. The **Short Name** is used by the **Layout Selector** to label the layout button. This attribute does not have any other use. If no **Short Name** is defined, the **Layout Selector** labels the layout button with the Name. **Short Name** and **Name** can be identical..

Description is a free text field you can use to enter additional layout information such as use, author, etc. The **Layout Group** field is used by the **Layout Selector** to display all or only certain layouts. Select a suitable group for the layouts and assign a group designation to each layout. Each layout can belong to only one group! A layout to be used with different groups has to be copied to each group.

In the tree view of the Layout editor, the layouts are listed as entries of the node of the layout group.

Use the selected name to later load this window arrangement.

Assign one or more **categories**: A **layout** can only be loaded into a **region** if the category matches Enter a semi-colon to separate multiple categories.

If **category** is left empty, a layout can be loaded into every region.

Check **opaque** if you want to display exclusively the windows of this layout. All other windows (e.g. from other layouts) are minimized. This command and its effects are applied only to the **region** in which the layout is loaded. In case no regions are defined, the windows of the entire Display Wall are minimized.

Use **Tiles** to divide the screen into horizontal and vertical fields, which facilitates the accurate positioning and sizing of a window. If a window is moved , it snaps to the tile grid with its upper left corner; height and width are always multiples of the grid distance.

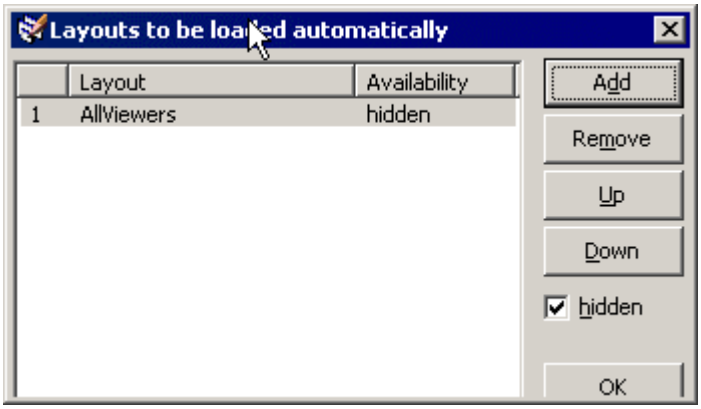
The layout can be protected against being managed by setting the **hidden** property. A hidden layout is accessible neither via the user interface nor by the Control Room Bus.

To prevent a layout from being unloaded by chance, set the hidden property!

Please note: A hidden layout can only be loaded automatically! A hidden layout can be visible or invisible, depending on Visible property to be set on the windows of the respective layout.

The Layout properties dialog also includes two buttons which applies to all layouts defined for a display wall, the button **load automatically** and the button **hidden layouts**.

Load automatically



This command opens a dialog where the layouts to be loaded automatically can be managed. Click on the **Add** button to get a list of the layouts defined for the current display wall, and select the desired layouts. Check **hidden** if the layout should be prevented from being managed.. If the list of the layouts to be loaded automatically comprises more than one entry, the sequence can be changed using the **Up** and **Down** buttons.

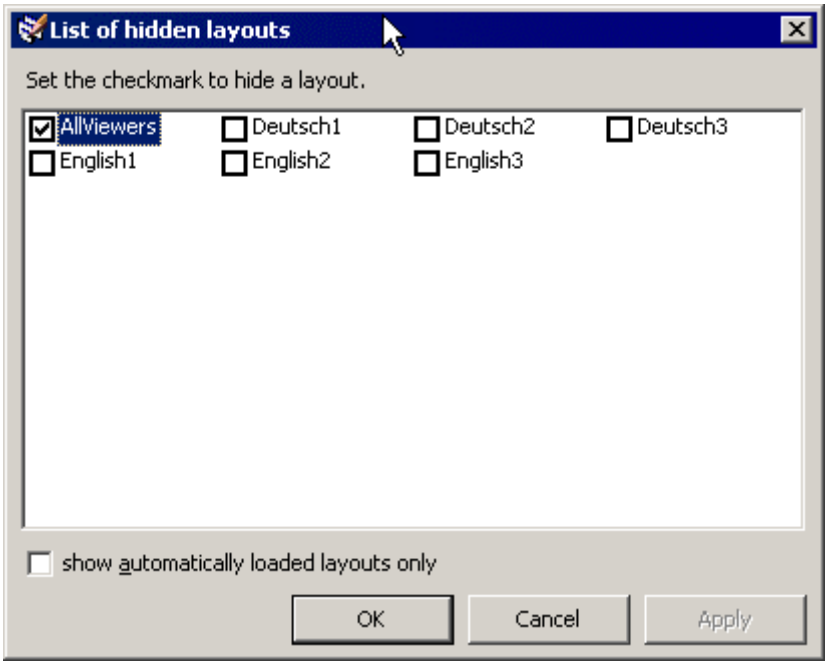
To prevent a layout from being loaded automatically, select it in the list, and click **Remove**.

Using this dialog, the hidden property of all layouts which are to be loaded automatically can be set.

The list has to be empty in order to modify the Use region property on the display wall properties dialog.

While a layout belongs to the list of automatically loaded layouts, it cannot be deleted from the database.

Hidden layouts



This command opens a dialog where all the layouts defined are listed. In case the layout is hidden, the checkbox of the layout is ticked.

Use this dialog to check or to change the **hidden** property of a layout.

Check **show automatically loaded layouts only** to confine the list to the layouts loaded automatically.

Hidden layouts are not known to the Control Room Bus and are not manageable via the **Layout Selector**. Depending on the respective property of the windows belonging to the layout, it is visible or not. Hidden means protected against being accessed.

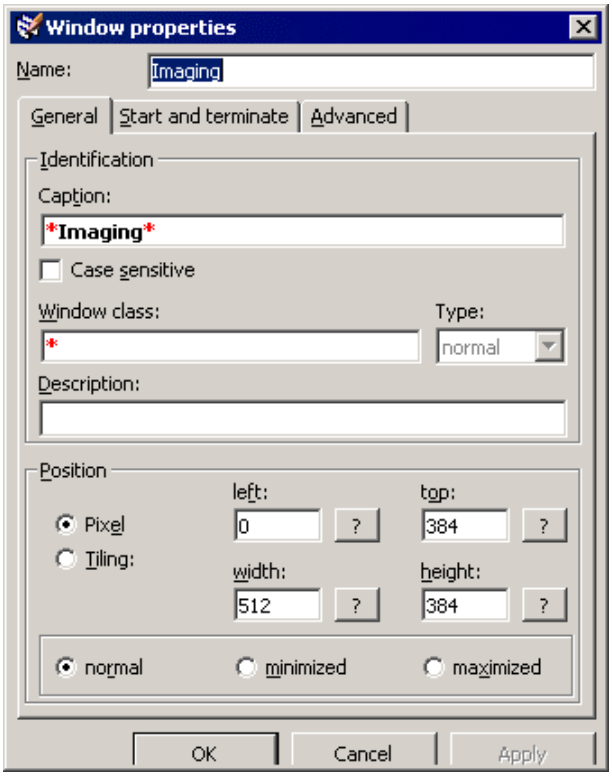
Use the default timeout for loading, or specify the time explicitly by clearing the checkbox and entering a numeric value (timeout in seconds). Use the same timeout for unloading, or define a new one.

To prevent a user from accidentally unloading an autoloaded layout, it is recommended to set the hidden property! If the hidden property is set, the layout is completely hidden from the Control Room Bus and from the graphical user interface.

8.3.3.3 Window properties

This dialog has 3 tabs: **General**, **Start and terminate**, **Advanced**.

General



Caption includes the window title used by the system, together with the **Window Class**, to uniquely identify the window. The Apollo Layout Management module can work properly only if every window can be clearly identified with these two attributes.

Activate uppercase/lowercase for a very precise and descriptive caption (**case sensitive**).

Parts of the title can remain undetermined unless relevant for identification (cf.Identifying windows). For example, the caption often depends on the opened file . In this case, an * is indicated in place of the undefined characters.

The **Window Class** permits distinguishing between different window classes. We recommend retaining the default setting *. This parameter is useful, however, if you want to distinguish between different windows, which might have the same title but different window classes. Use the enclosed tool **Window Spy** to determine window classes.

Defining Caption and Window Class requires that the characters are entered correctly, see Identifying windows. Otherwise the windows won't be recognized!

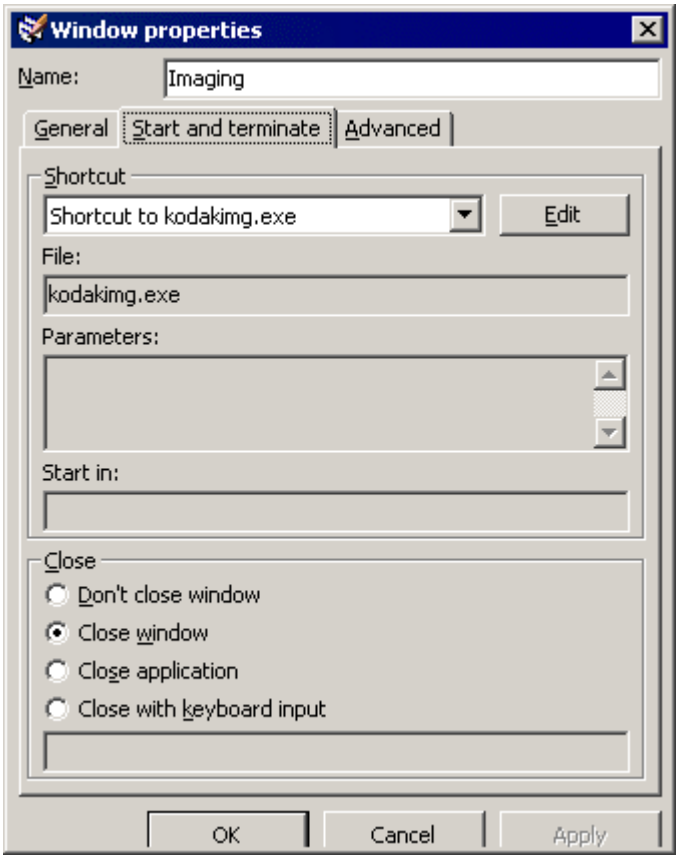
With **Type** information about the window type is given (normal: application, Pro: ProViewer window, etc.).

You may also enter descriptive information about the window in **Description**. The description is displayed in the client area of the window in **Remote Desktop.** In addition this information is also showed as Tool Tips of the mini window as well as Tool Tip on the button of this window in the task bar.

Enter the coordinates of the upper left corner point of the window as well as its height and width. If the layout is assigned to one or more regions, these coordinates refer to the upper left corner of the respective region. When loading a layout, windows are resized to fit into the respective region even when this option is not checked on the **Advanced** tab. Click on **?** to specify for the thus marked value that loading a layout does not modify it.

The **Normal**, **Minimized**, **Maximized** fields allow you to specify the window state when opening a window.

Start and terminate



Shortcut defines the applications to be launched when a window with the indicated title has not yet been found when activating the layout.

Only shortcuts defined in the database can be selected!

Click on **Edit** to open the shortcut property dialog. In case the window type on the General tab is indicated as normal, the standard dialog to configure a shortcut pops up, cf. 8.3.3.4 Shortcut properties.

In cases the window type is of type Frg, or Cot, or Web (= creating via drag&drop of the viewer sources into a layout), **Edit** displays the property dialog to configure the start parameters of the viewers, cf.8.4.4.4 Inserting viewers in a layout.

Windows that are part of a layout are usually closed when the layout is removed again. However, this is only possible if the window is not required by a layout that is still active. If a window is associated with two loaded layouts it is closed only when the last of the two layouts has been removed.

Windows which were already open before loading the layout are not closed.

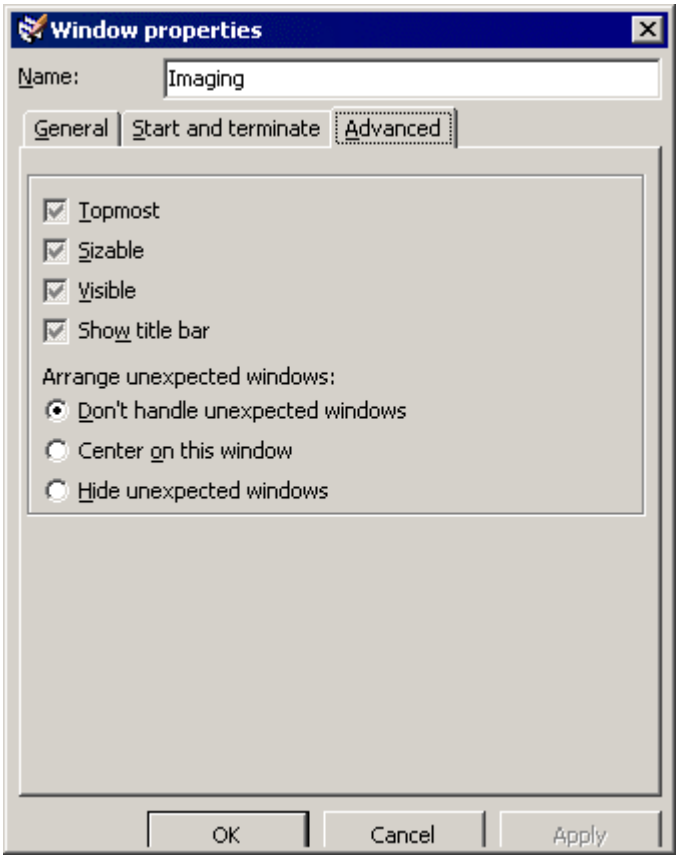
The **Don't Close Windows** option determines that such a window is to remain open even if not required by any of the active layouts.

The **Close Window** option specifies that such a window be to be removed. If the application then opens additional windows (e.g., “Save Changes?” dialog), these windows are not considered.

Close Application terminates the window linked with the program so that all associated windows are closed. (including e.g. a "Save Changes?" dialog)

Close with Keyboard Input specifies that the window be to be closed using special means. The required keyboard input can be entered into the edit field. Mind the correct input of characters, see Commands via keyboard

Advanced



Use this tab to define the following properties for the window:**Topmost**, **Sizeable**, **Visible**, **Show title bar.**

The default setting (indicated with gray checkmark in checkbox) maintains the properties of a window. Select a property you want to change by clicking on it (black checkmark) or unselect a property (no checkmark).

The **Topmost** option means that the selected window will always be displayed on top of all the others.

Sizable means that the size of the window can be changed using the mouse or the system menu. A window with an unchangeable size setting snaps to the grid with its upper left corner if **Tile** has been activated while a window with a changeable size can snap to the grid with all four corners.

Use the **Visible** property to show or hide a window. A invisible window is not displayed in the taskbar either. Windows are invisible when loading a layout if the **Visible** property has not been activated.

Select **Show title bar** to show the title bar of the window, clear the checkmark to hide the title bar.

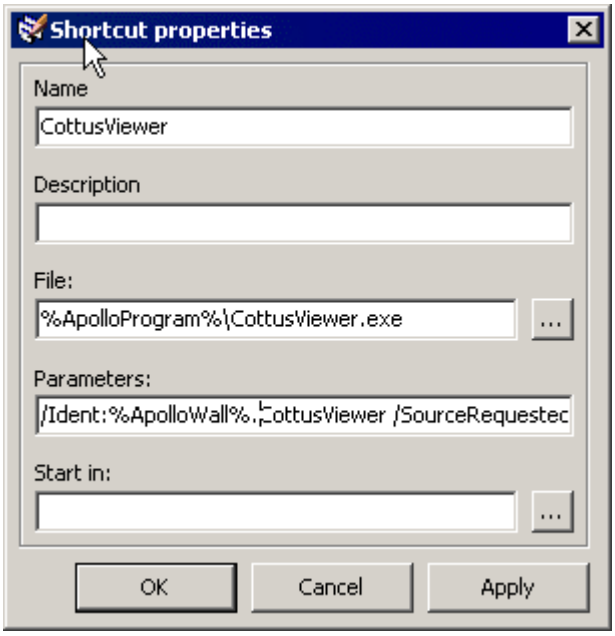
How to treat unexpected windows (error messages, etc.) is specified on this tab as well. Unexpected windows are not defined in the layout but should not appear on the desktop randomly. Choose from the following options: **Do Not Treat Unexpected Windows, Center on this Window**, **Hide Unexpected Windows**.

These settings overrule the settings which might be defined in the Default Area. Settings of the Default Area ar only applied in case of "Don't handle unexpedted windows".

However, the **Center on this Window** option also minimizes unexpected windows that are larger than the windows of the application and centers all unexpected windows of the same application (identical process ID) within its window.

To change the settings subsequently, select the desired entry in the Tree View and then click on **Properties|Layout** in the menu bar.

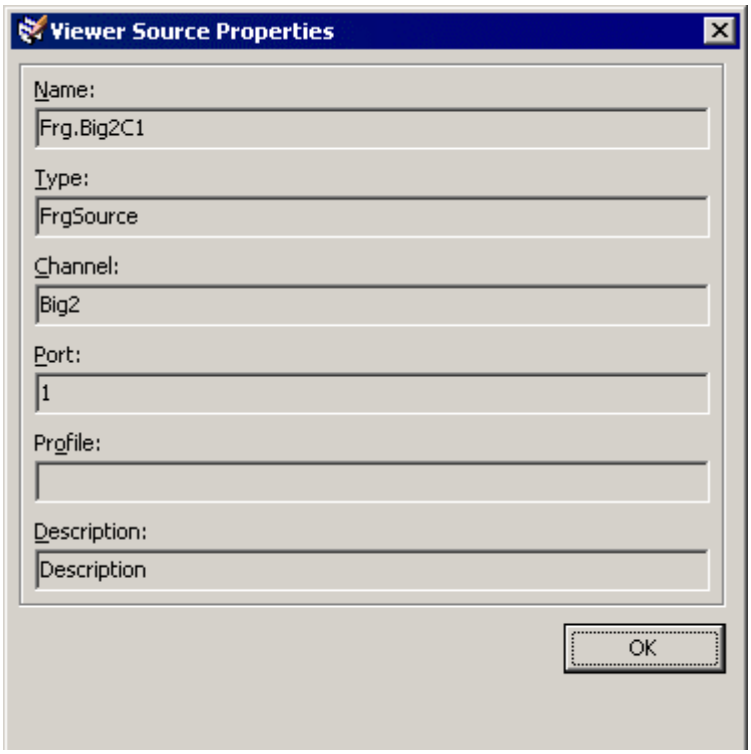
8.3.3.4 Shortcut properties



Specify the **Name** and **Description** of the shortcut. In the **File** field, indicate the application linked with the shortcut. If the application is to be launched with special options, enter these **Parameters** into the respective field. Indicate the entire path of the files required by this application in the **Start in** field.

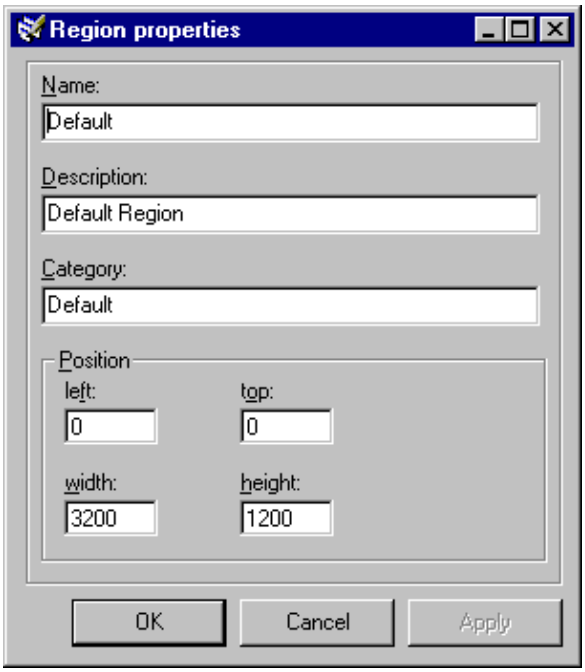
Since viewer idents have to be unique, copying a layout with viewers to another desktop server might fail due to the same name. Therefore it is recommended to introduce an environment variable (system level) on the desktop server for the wall and to start the viewer idents with this environment variable (e.g. "ApolloWall" equals "wall1" on desktop server 1, "wall2" on desktop server 2.

8.3.3.5 Viewer sources properties



This dialog displays the definition of the viewer source as listed in the file viewersources.ini. In the layout editor, these properties can only be viewed. To change them, edit the file viewersources.ini.

8.3.3.6 Region properties

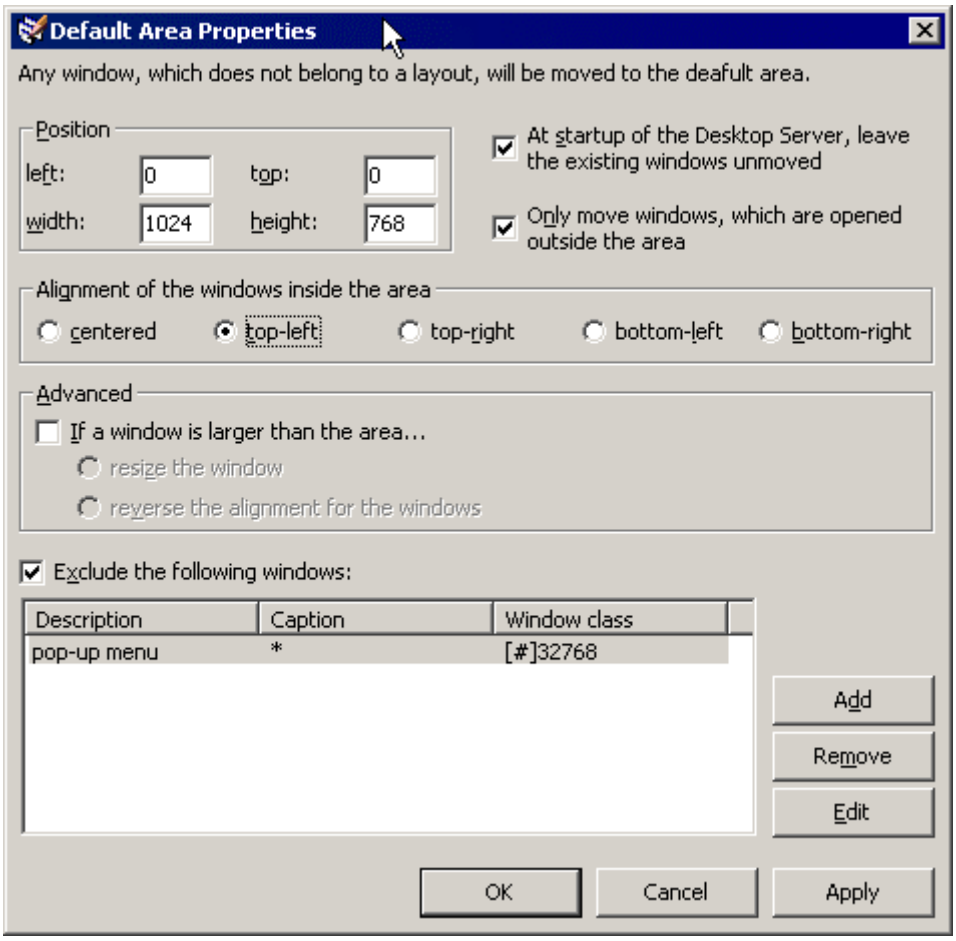


Specify the **Name** and the **Description** of the region. Assign a **category** to this region. This category acts as a filter for the layouts: only layouts which category matches or which have the general category (== category is empty) can be loaded into this region. Enter the position of this region on the Display Wall by defining the position of the upper left corner (**left**, **top**) and the size of the region (**width**, **height**). All values are given in pixels.

8.3.3.7 Default Area

This property dialog can only be selected if unexpected windows are moved to the default area (option selected in **display wall properties** dialog).

A dialog pops up to define the position of the area (enter **left** position, **top** position, **width** of area and **height** of area in pixels), the **alignment of the unexpected windows inside the area**, and the **advanced** handling of unexpected windows which do not fit into the default area. Furthermore exceptions can be defined, e.g. unexpected windows which are allowed to pop up outside the default area.



In the layout editor, the desktop depicts the area for unexpected windows as reddish grid.

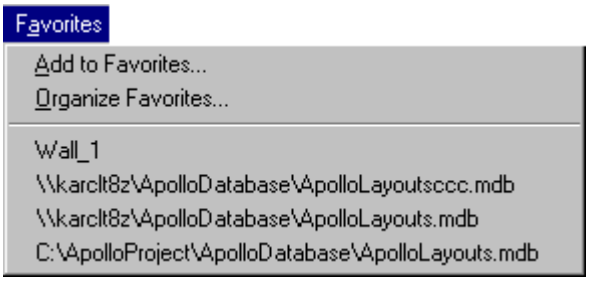
In the tree view, the default area is added on the bottom of the list.

8.3.4 Window menu

The **Window** menu lists the commands for **Minimizing**, **Maximizing**, **Move**, **Change Size**, **Restore**, and **Close**. These window commands correspond with the system commands and are available via the context menu (right mouse button) of the title bar of the windows and of the window buttons in the taskbar as well. You can also minimize/restore and activate/deactivate a window by directly clicking on the respective button.

A window being closed is removed from the layout!

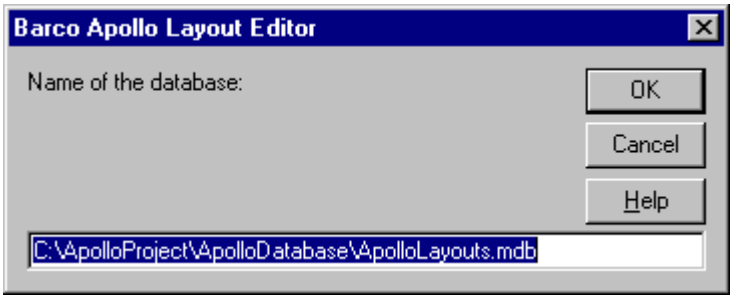
8.3.5 Favorites menu



Use this menu option to store the Apollo databases of as many Display Walls as desired in the form of favorites, which then can be activated with a simple click of the mouse.

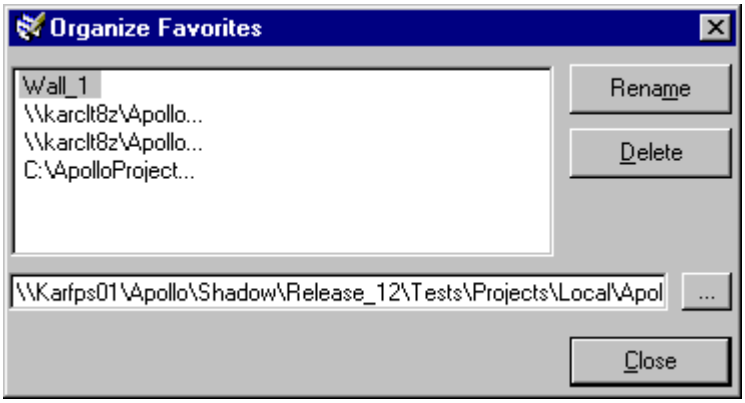
Use the **Add to Favorites** to add the currently opened database to the list of favorites. The following dialog opens:

8.3.5.1 Add to favorites

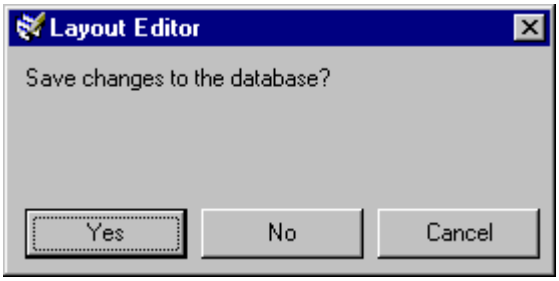


8.3.5.2 Organize favorites

Use this command to add the Apollo databases of all **Desktop Server**s within the Apollo network to the list of favorites. Select **Rename** to address the database using a freely selectable name.

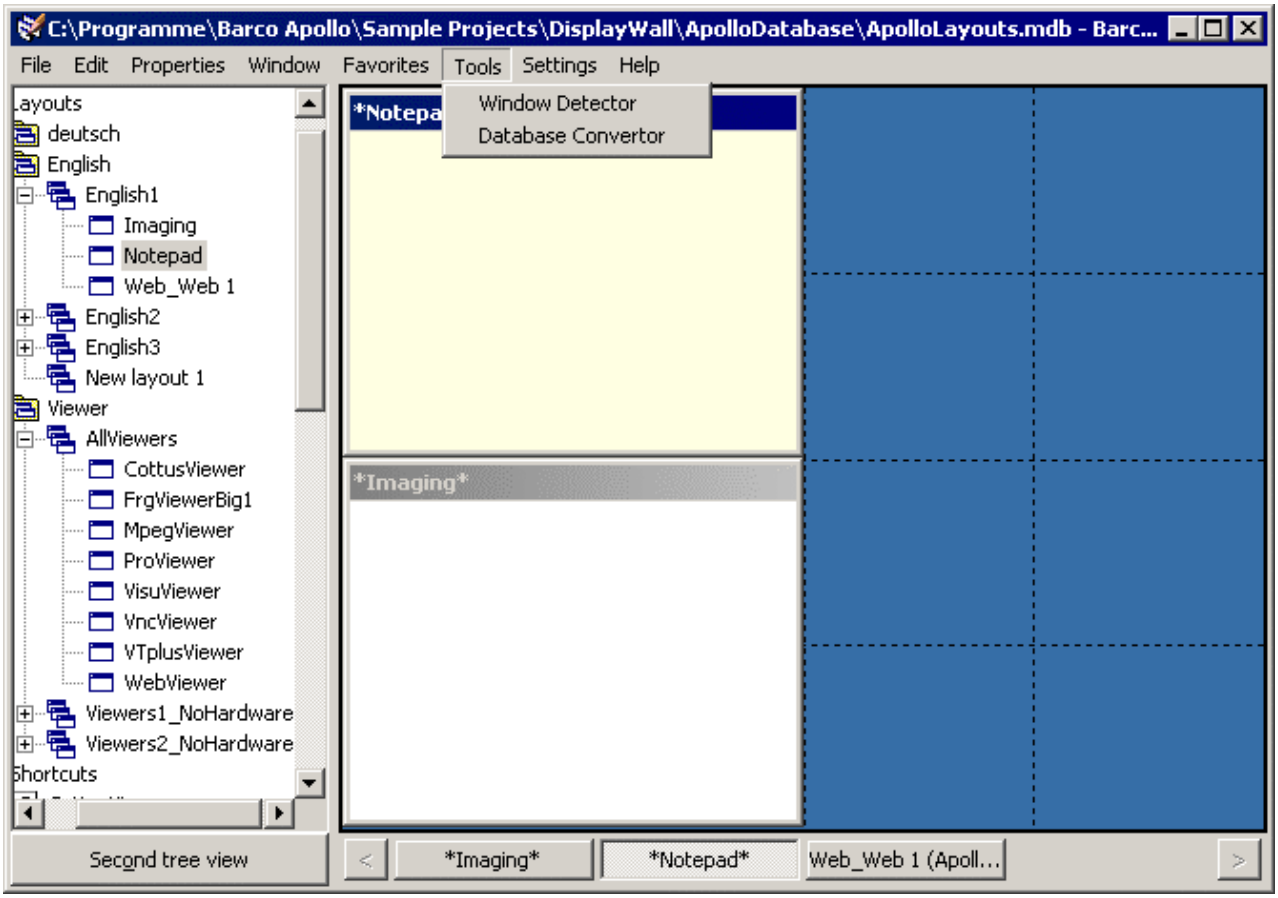


The names of all databases organized with the favorites function are listed as a menu entry. Open a database by clicking on the corresponding entry. Selecting a database closes any already open databases and you are asked if you want to save any changes:



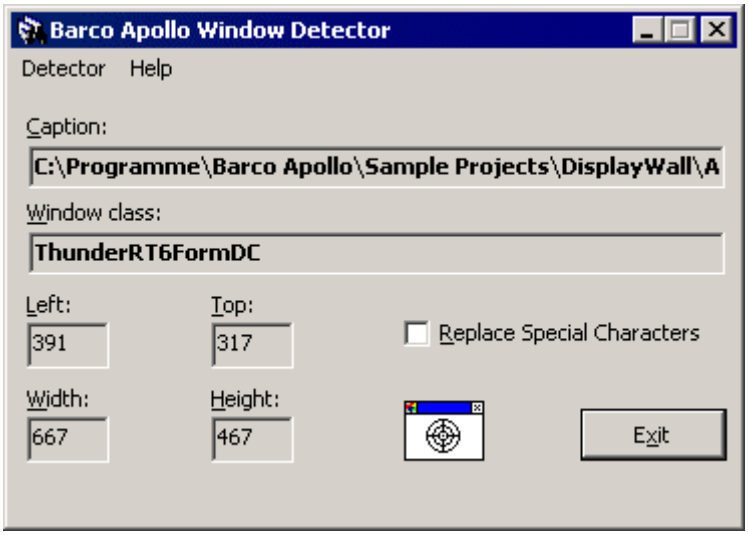
Confirm this dialog with **Yes**, **No**, or **Cancel**.

8.3.6 Tools menu



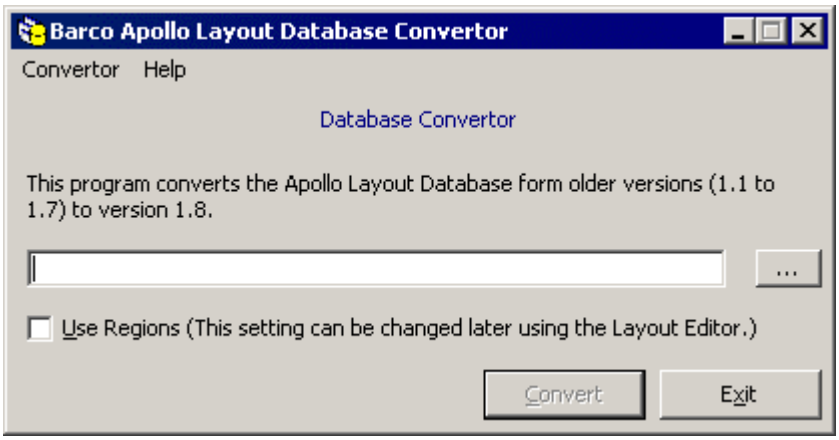
The Tools menu gives access to the applications **Window Detector** and **Database Convertor**.

8.3.6.1 Window Detector



Use this application to find out **caption** and **window class** as well as the **positions** of visible windows of an application. Just drag the colored icon into the desired window. Mark the required information, copy it and paste it into the respective fields in the dialog **Window Properties**. In addition, special characters can be replaced using the replacement convention as described in Commands via keyboard

8.3.6.2 Database Convertor

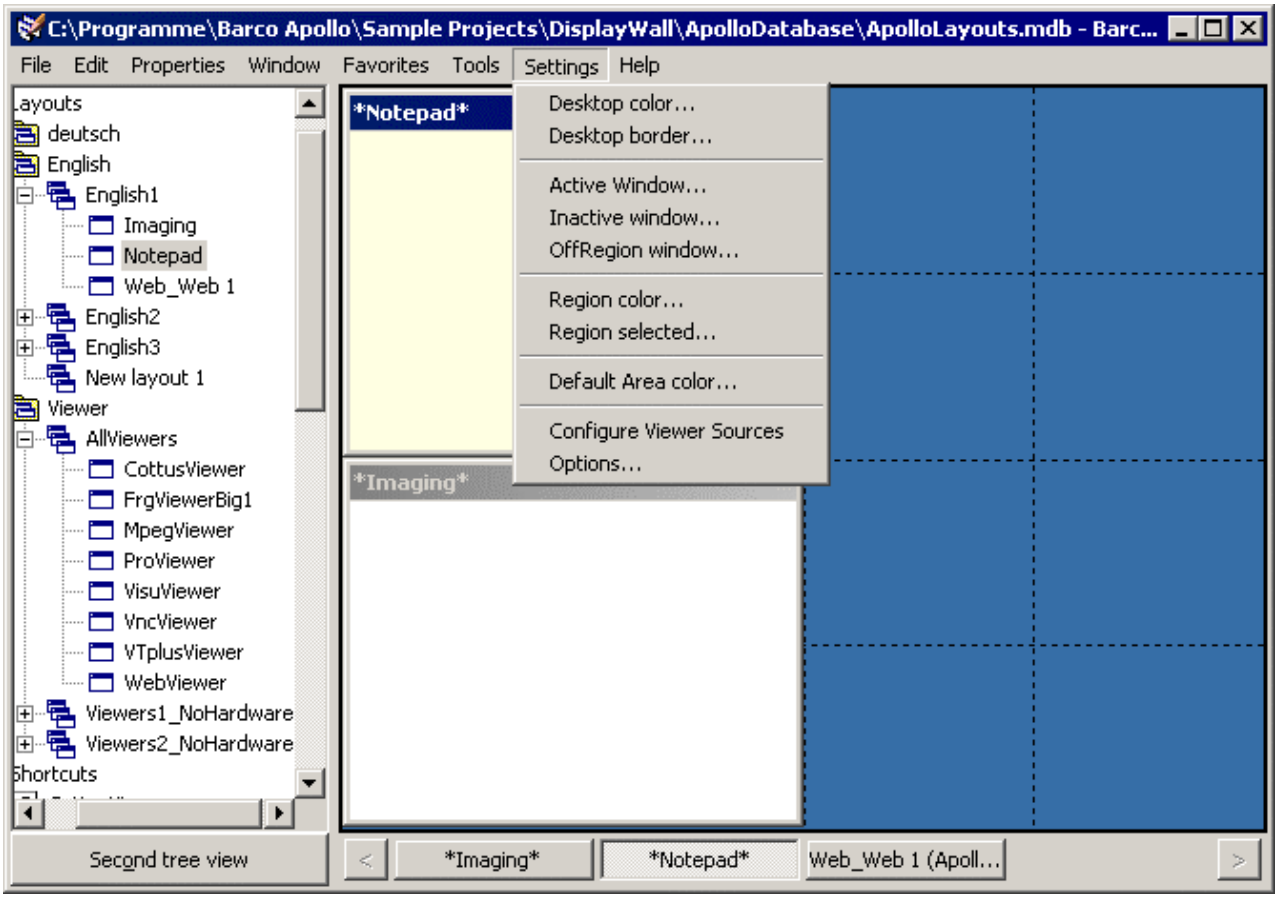

Barco Apollo Layout Database Convertor
Convertor Help
Database Convertor
This program converts the Apollo Layout Database form older versions (1.1 to 1.7) to version 1.8.
...
Use Regions (This setting can be changed later using the Layout Editor.)
Convert
Exit

The **Database Convertor** converts a database of previous Apollo versions to the current Apollo version.

Select **Use Regions** to show the regions defined in an Apollo 1.3 database. (The regions are shown in the **Layout Editor** and in the **Layout Selector**).

If this option is not checked, the regions (if existing) will be hidden. Later they can be shown again by means of the Option **Use Regions** of the menu item **Display Wall** of the **Properties** menu.

8.3.7 Settings menu



Use the **Settings** menu to assign a color to the desktop, the desktop border, active and inactive windows, OffRegion windows, the region, and the selected region, the default areas.

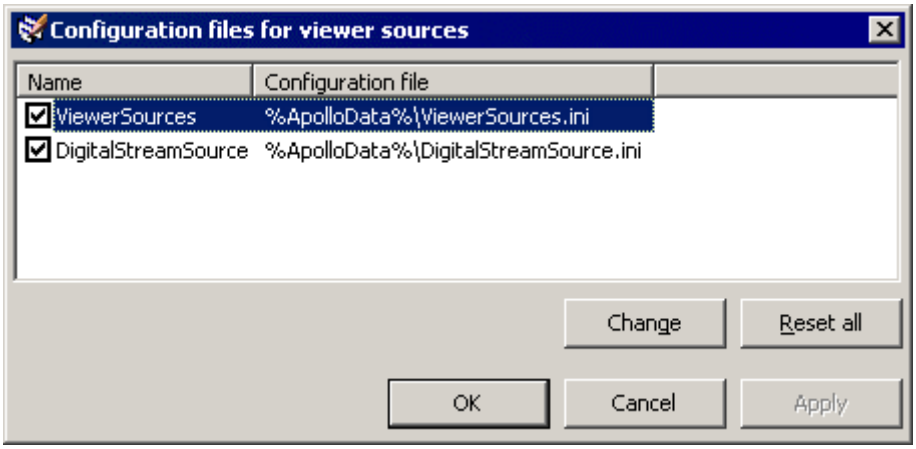
Selecting an menu item opens the standard windows color dialog where you can select or edit the color you want to assign to this item.

The menu also includes the item **Configure Viewer Sources**. Basically the viewer sources and the sources for the digital streams are those defined in the local project in the file Viewersources.ini and the DigitalStream-Sources.ini, respectively.

It is possible to ignore these files, or to select viewer source files different from the default files.

Use the command **Settings|Configure Viewer Sources** to select different files for the viewer sources and the digital streams.

The following dialog is displayed



Uncheck the respective configuration file to ignore it.

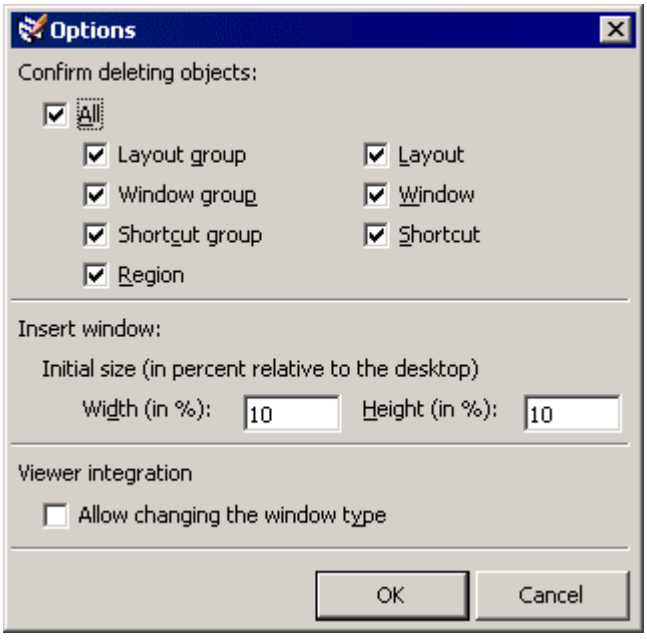
Double click on the entry, or click on **Change** to browse for a different file.

Activate your modification by clicking **Apply**.

These modifications are stored in the user specific files. (Windows NT: **....\WinNT\Profile\User Name** or. Windows 2000:... **\Documents and Settings\User Name**), using the subfolder **... \Local Settings\Application Data\Apollo**).

If you edit the .ini-files while the Layout Editor is running, modifications will ony be visible in the Layout Editor after clicking Reset all. There is no automatic update of the file entries!

The command **Options** opens a dialog to define the behavior when deleting objects, the initial size of inserted windows and how viewers are to be integrated. Customize the behavior to your needs by selecting/unselecting the respective options.



8.3.8 Help menu

The menu option **Contents** opens the table of contents of the online help file. **About Layout Editor** provides application information.

8.4 Working with the Layout Editor

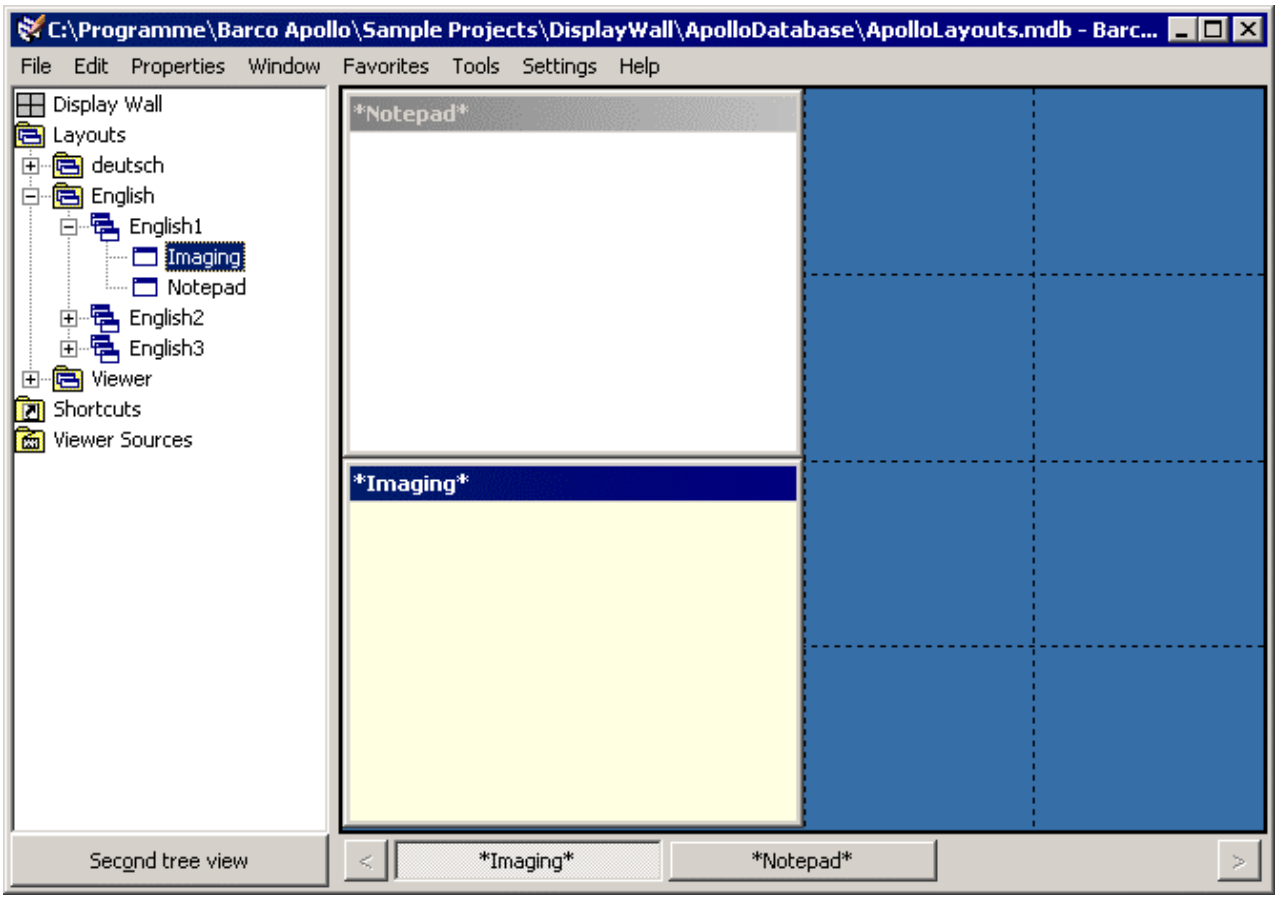
8.4.1 Loading layouts and shortcuts

The shared **Apollo Database** directory located on the control computer of a Display Wall or any network computer contains a database with the layout (**Apollo Layouts Database)** definitions and linked programs for this Display Wall.

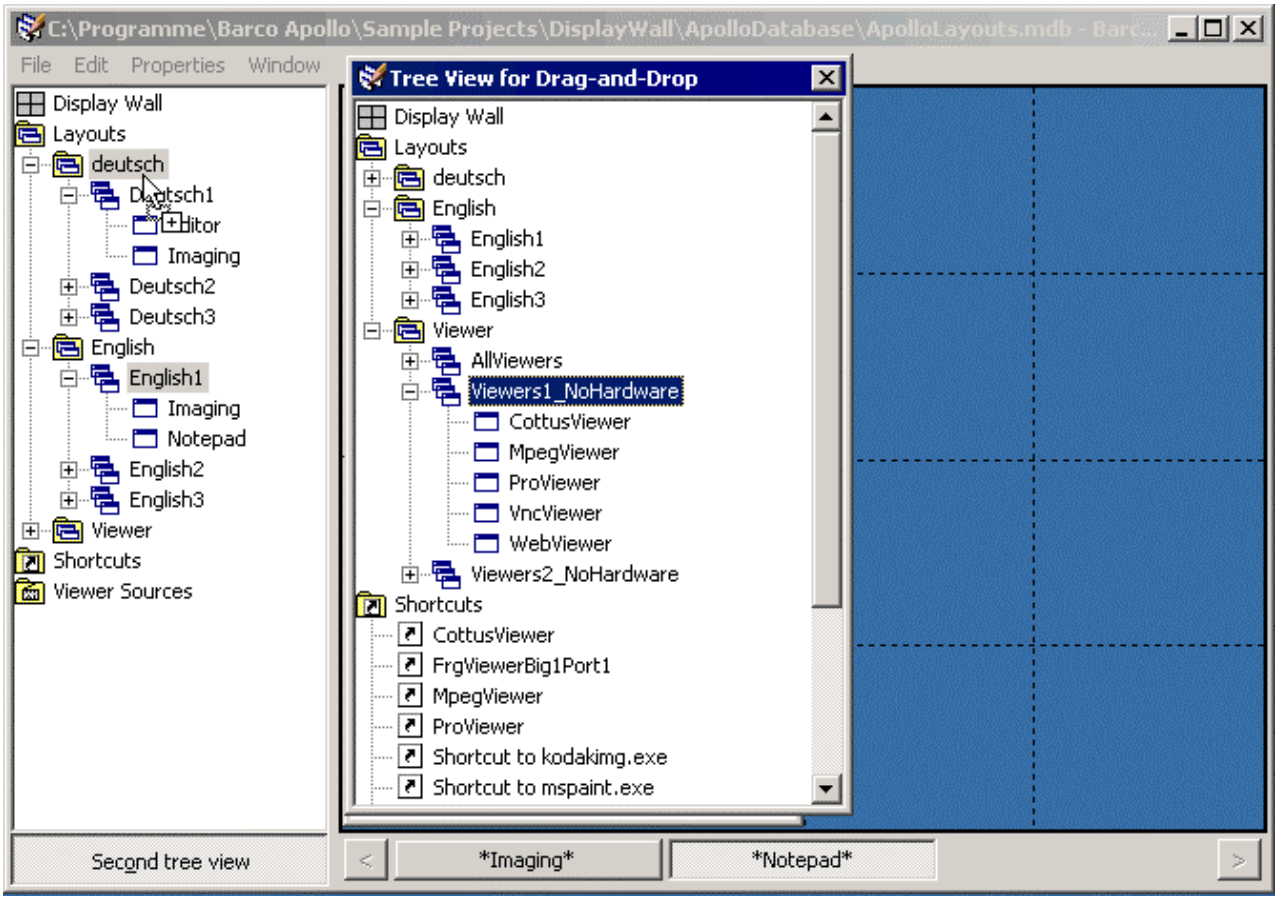
Use the **File|Open** command to open the desired database or select the corresponding entry from the MRU list or select the database from the list of **Favorites**.

Already defined layouts are represented in a tree-like structure (Tree View) . Click on the entry **Layouts** to expand the view. The **Layouts** node is expanded to show the layout **groups,** the group node is expanded to show the names of the layouts belonging to this group. Finally a specific layout is expanded to show its windows, shortcuts and viewers (if defined in this layout).

Select a layout. The windows are displayed on the desktop, and you can interactively specify position and size. Specify additional parameters with the **Properties|Window** menu.



There is also the possibility to show a **Second tree view**. Click on the respective button in the task bar of the Layout Editor. The second tree view, a 1:1 copy of the tree view, is displayed. Use this second tree view to drag and drop the desired windows, shortcuts, viewers into the respective layout.



Of course you may also use the respective commands from the **Edit** menu or from the context menu (right click on the respective object).

When you copy a window, a layout, a shortcut (either via copy/paste or via drag&drop), the name of the copy will automatically be set to Copy of... Copy(2) of... Copy(3) of (as with Windows Explorer).

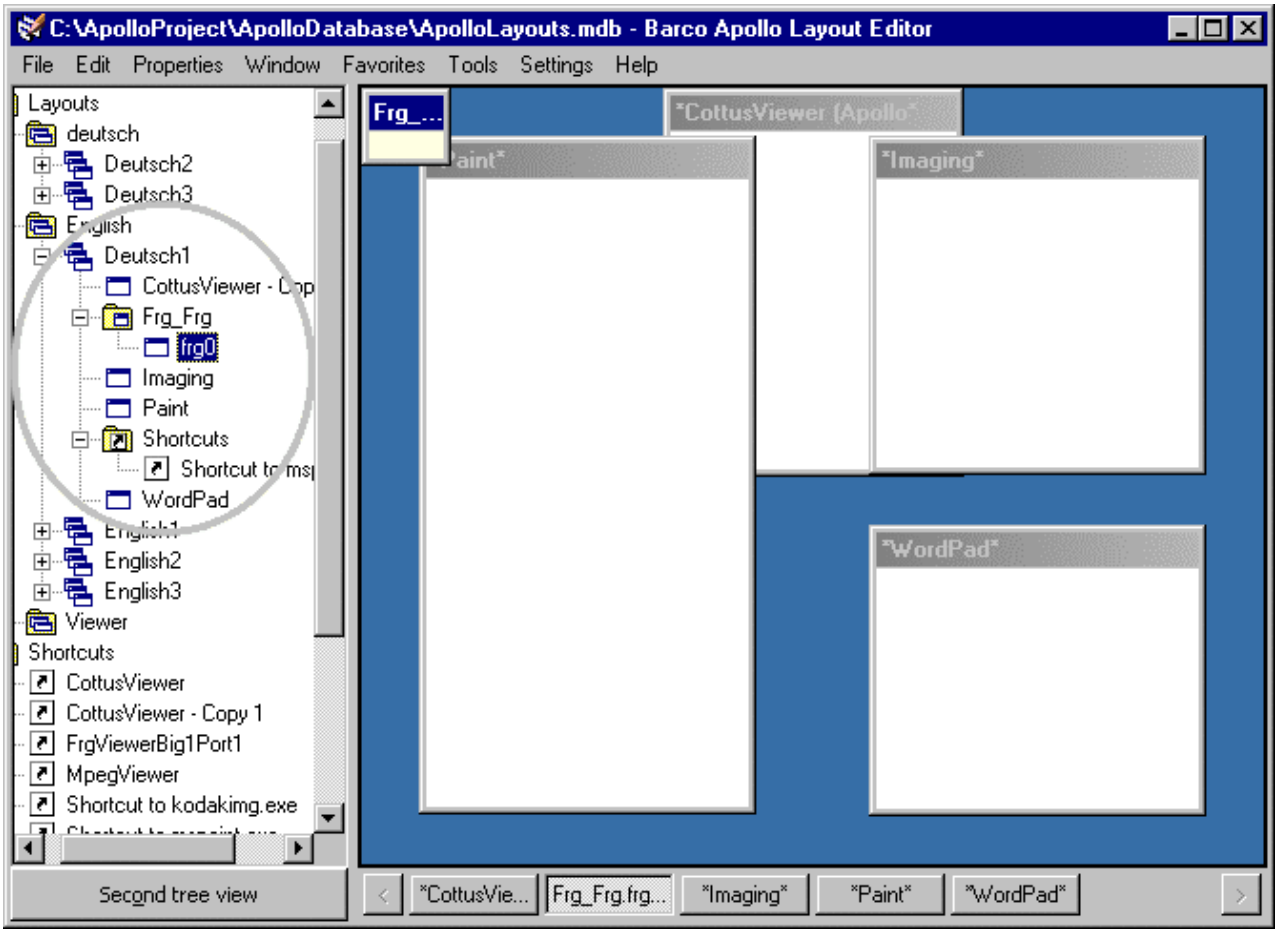
The Tree View also depicts program shortcuts associated with the defined layout windows and the **regions** of the Display Wall. As default one region is defined which covers the entire Display Wall. Multiple regions can be created which may overlap.

The names of the viewers, however, when the viewer is taken from the Viewer sources, are built differently: instead of copy(1) of ... copy(2) of ... the last character is a digit which is incremented for every viewer: frg0, frg1, frg2...

8.4.1.1 Structure of tree view

Starting with Apollo 1.8, the tree view features an enhanced structure! This structure is applied automatically on every object. When addressing objects via command lines it is mandatory to use the "fullname" inlcuding the "path" and not only the name of the object. The "directories" have to be separated with a dot.

The naming convention gets a bit more clear when looking at the screenshot below. To send commands to frg0, the recipient has to be addressed as **English.Deutsch1.Frg_Frg.frg0**. The actual name is derived from the string following the last dot (seen from left to right).



8.4.2 Defining regions

This functionality is only available after selecting the option Use Regions in the Properties|Display Wall menu item.

A region is a rectangular area of the Display Wall. The **Edit** menu features the **Cut**, **Copy**, and **Paste** commands. Select a region defined in the database. Use these commands to copy and paste the desired region and paste them to the Tree View.

Use the context menu (click with right mouse button) of the region to **copy**, **paste**, **delete** a **region**. If you want to change its name, click on **rename**. The properties of a **region** defined in the database can be edited via the **Properties** command.

Create a new region with **Edit|Insert region**. The dialog to enter the **region properties** is displayed.

The command **Set as Testing Region** will inactivate all layouts which are not assigned to this region (which category does not match). Only the active layouts of the testing regions are available and can be edited. When selecting a layout, the respective windows are arranged in the testing region. If a window goes across the borders of the region, it's displayed in the color assigned to **OffRegion** windows.

Only windows which are completely within a region are displayed on the Display Wall or on the **Remote Desktop**. If a window exceeds the borders of a region, it is automatically resized to fit into the region.

8.4.3 Defining shortcuts in the database

The **Edit** menu features the commands **Cut**, **Copy**, and **Paste**. These commands can be applied on the following objects: layout, window, shortcut.

Select a shortcut defined in the database. Use these commands to copy and paste the desired shortcut.

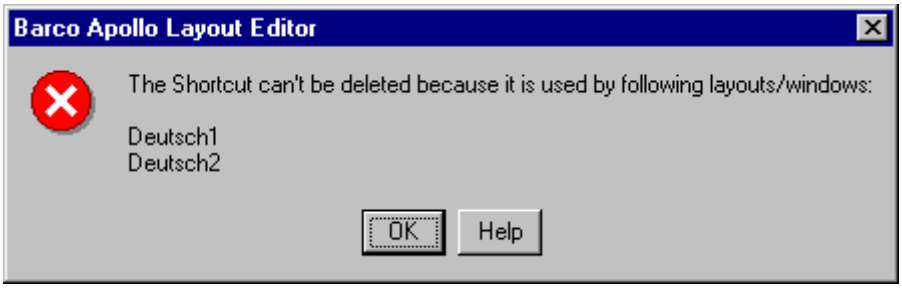
The properties of a shortcut defined in the database can be edited via the context menu (click with right mouse button) or with the **Properties|Shortcut** command.

Create a new shortcut with **Edit|Insert Shortcut**. The dialog to enter the shortcut properties is displayed.

A shortcut is globally applied to the entire database, i.e., the defined properties are valid in every layout or window where this shortcut is used.

A shortcut added to a layout has to first be defined and specified in the database.

The selected shortcut is deleted with **Edit|Delete Shortcut.** Only shortcuts no longer needed by any other layout or window can be deleted. The following dialog displays information about where this shortcut is still needed if this condition is not met:



8.4.4 Defining layouts

The **Edit** menu features the **Cut**, **Copy**, and **Paste** commands. Use these commands to copy complete layouts or individual windows of a layout and paste them to the Tree View or a different layout. Shortcuts can also be copied and added to a layout.

You can also use the **Insert Layout** command from the **Edit** menu to define a new layout or copy and modify an existing layout. The dialog to enter the layout properties is displayed.

To change the settings subsequently, select the desired layout in the Tree View. Use **Properties** from the context menu (right mouse button) or **Properties|Layout** in the menu bar; the dialog described above is then displayed, see .

A layout includes the window arrangement of all applications launched on the respective region on Display Wall. If an application not running in a window is to be launched when loading a layout, the corresponding shortcut to this application is added to the layout.

The arrangement of the windows are referenced to the region with the same categories. The position of the windows are relative to the upper left corner of the region.

When loading a layout, all windows which don't fit into the respective region are automatically resized until they are within the region.

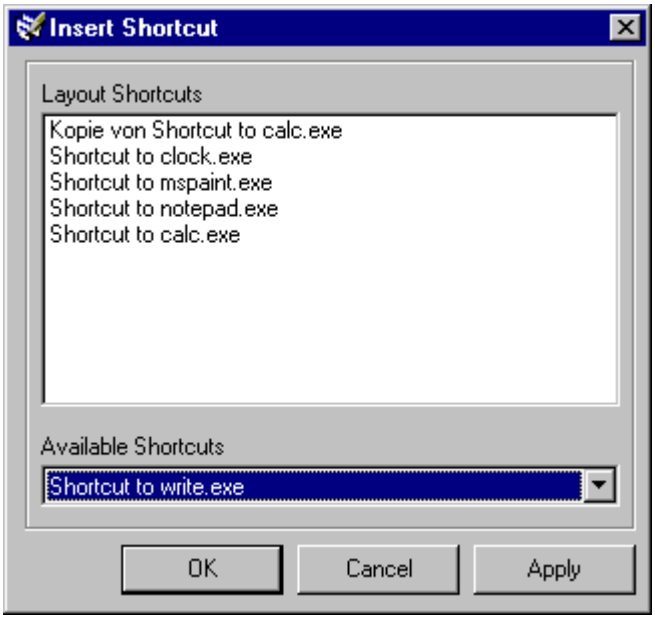
To see whether loading a layout will have to adjust the windows, the region in which this layout is loaded can be set as **testing region** (right click on the region in the Tree View and check **Set As Testing Region**. Windows which don't fit into the region are then displayed in the **OffRegion** color. Resize the windows manually until they fit into the region or click on **Adjust layout to the region** on the **Layout** context menu in the Tree View.

8.4.4.1 Inserting windows into a layout

Select the **Edit|Insert Window** command. The dialog for specifying window properties, described above, is displayed. Enter the desired parameters.

8.4.4.2 Inserting shortcuts into a layout

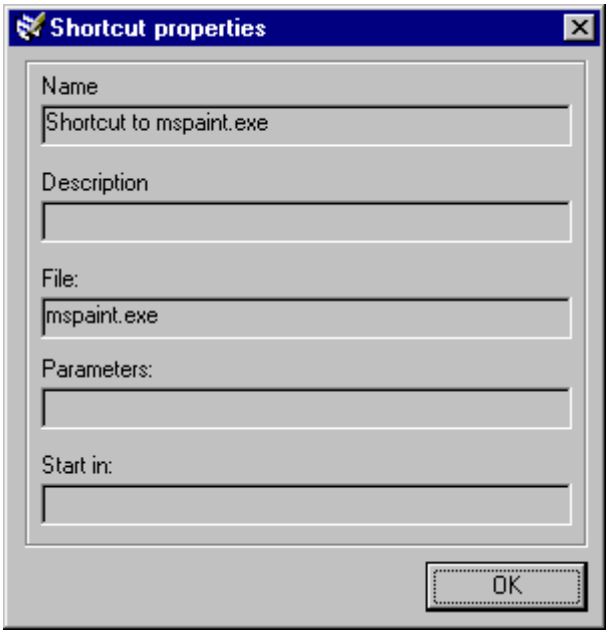
Select **Edit|Insert Shortcuts**. A dialog opens where you can select a shortcut from those already defined in the database. Select the desired item from the **Available Shortcuts** list box.



Only a shortcut already defined in the database can be added to a layout!

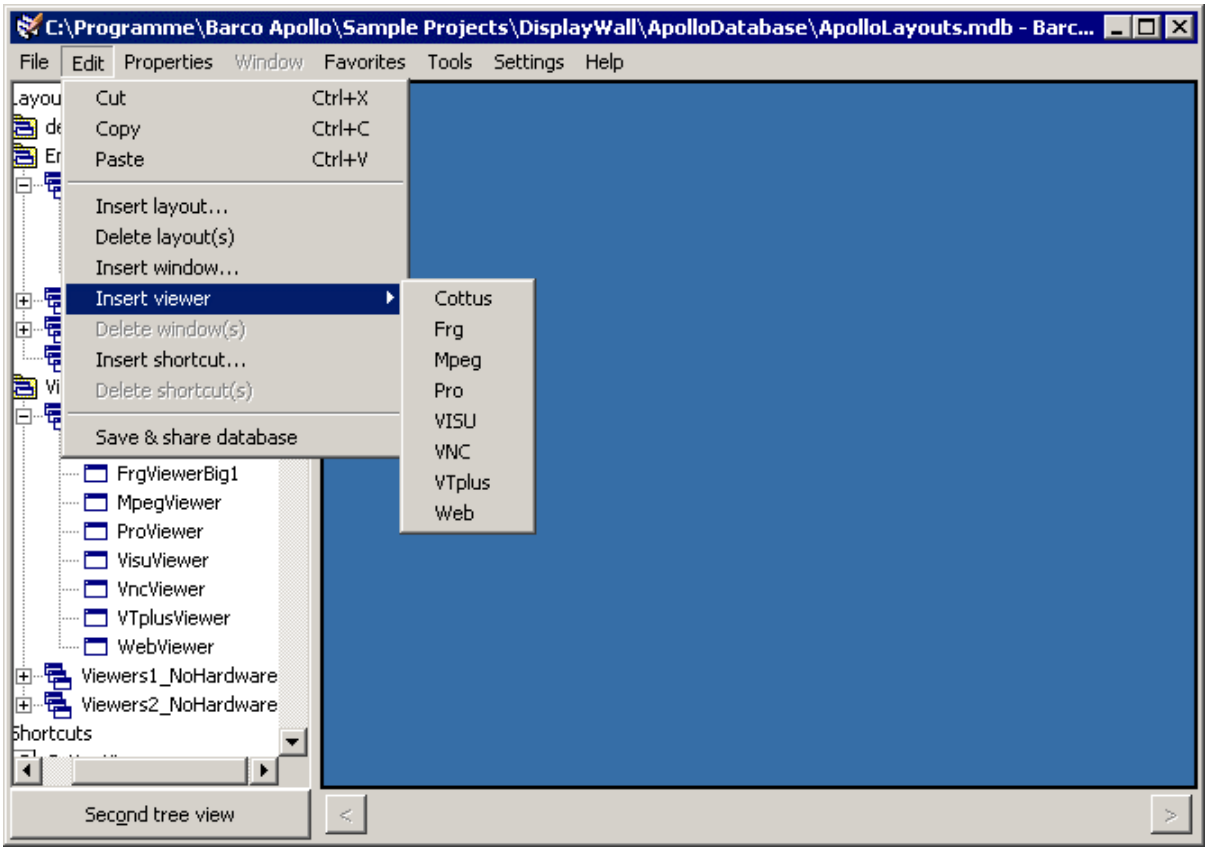
8.4.4.3 Properties dialog of shortcuts in the layout

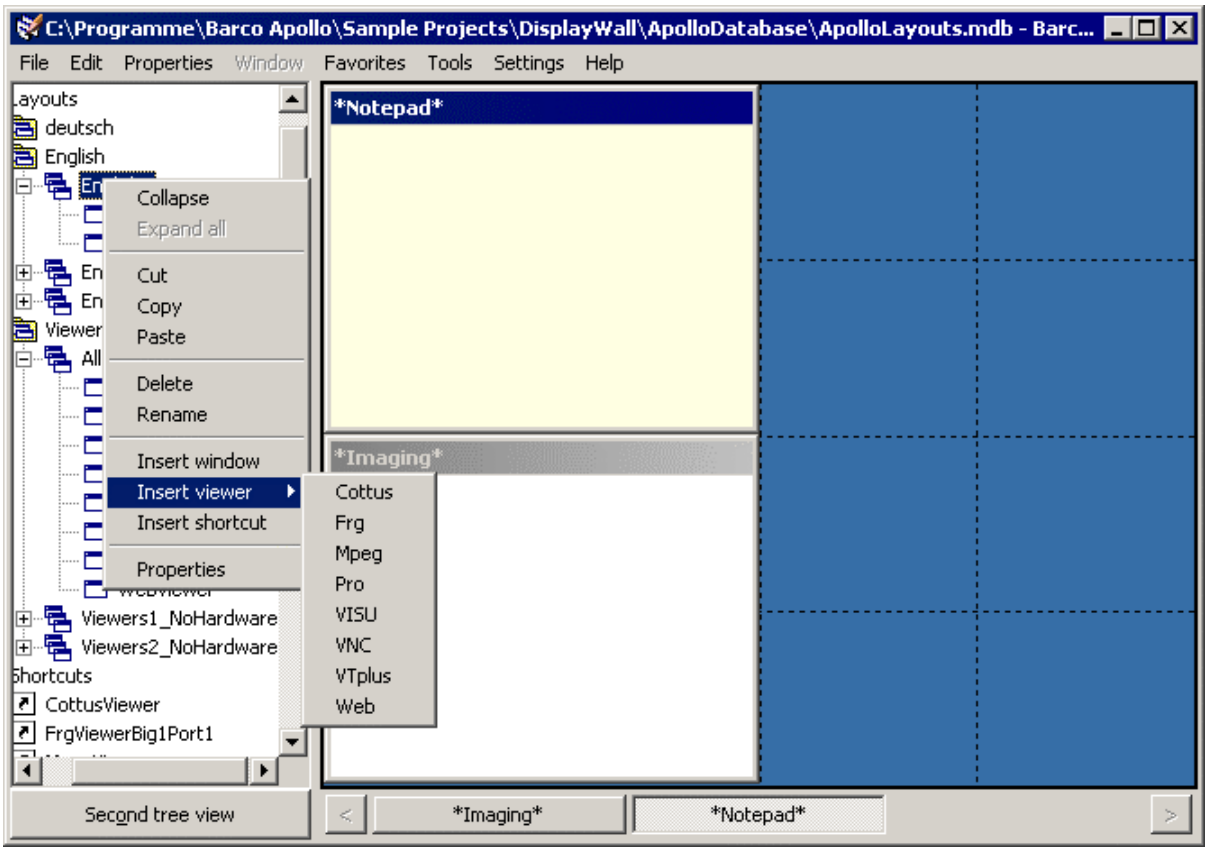
The shortcut properties are fixed with the definition of the shortcuts in the database and cannot be modified according to layout. This means the **Properties** dialog of a shortcut in a layout cannot be edited:



8.4.4.4 Inserting viewers in a layout

Viewers can be inserted via the command **Edit|Insert viewer** or via the context menu of a layout.





There is also the possibility to insert it via drag and drop by means of the second tree view.

Viewers are completely integrated in the layout editor: drag&drop or copy/paste one of the objects in Viewer Sources into the layout, and the respective viewer window will be created with an internal shortcut to the viewer application. The parameters for the viewer then can be set via the Edit button of the dialog Window properties, see below.

To include a viewer window in a layout via drag and drop by means of the second tree view, proceed as follows:

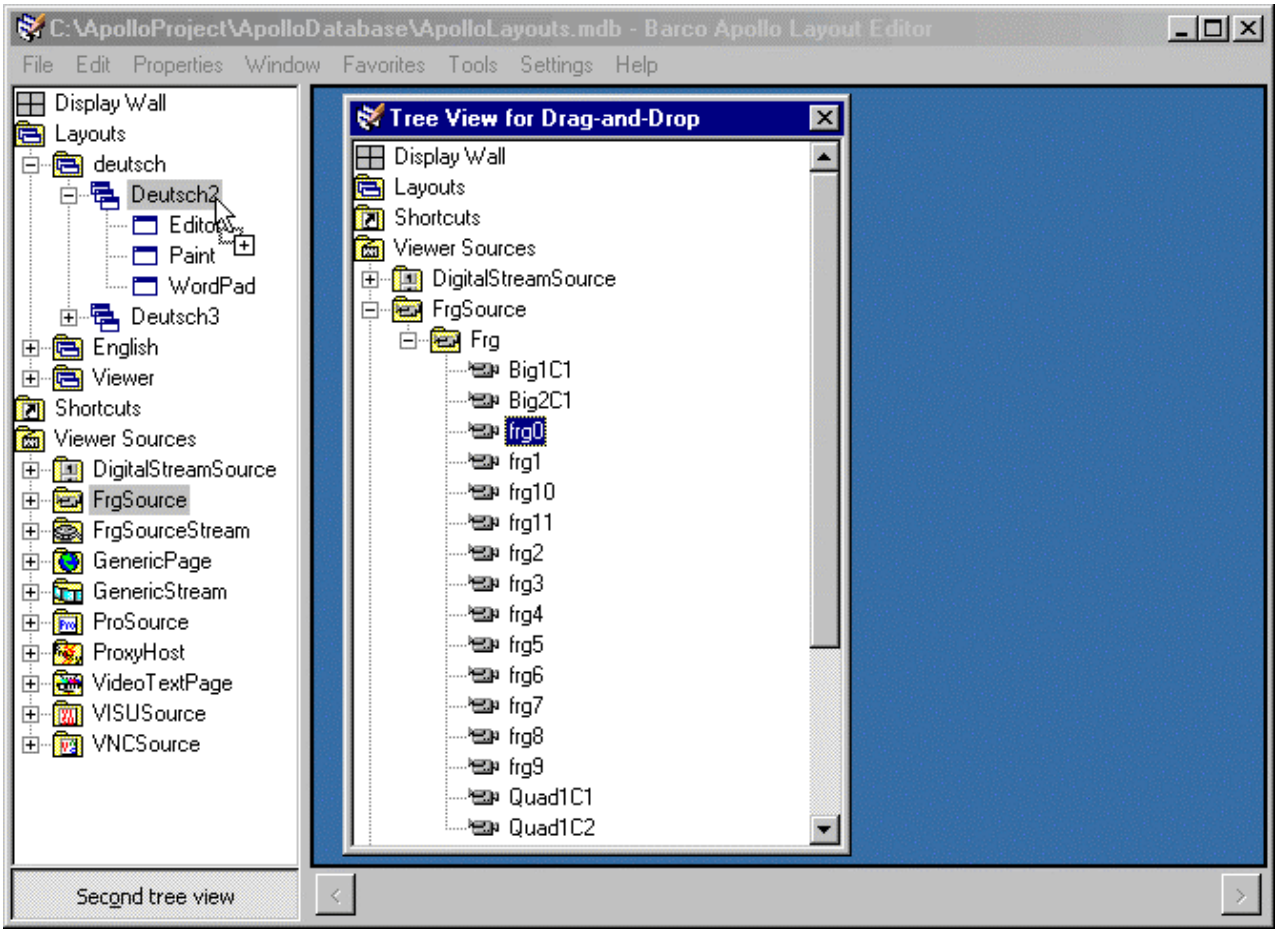
Click on **Second Tree View t**o open the tree view for drag&drop.

In the tree view for drag&drop, expand the node Viewer Sources. All sources defined in the configuration file viewersources.ini are listed.

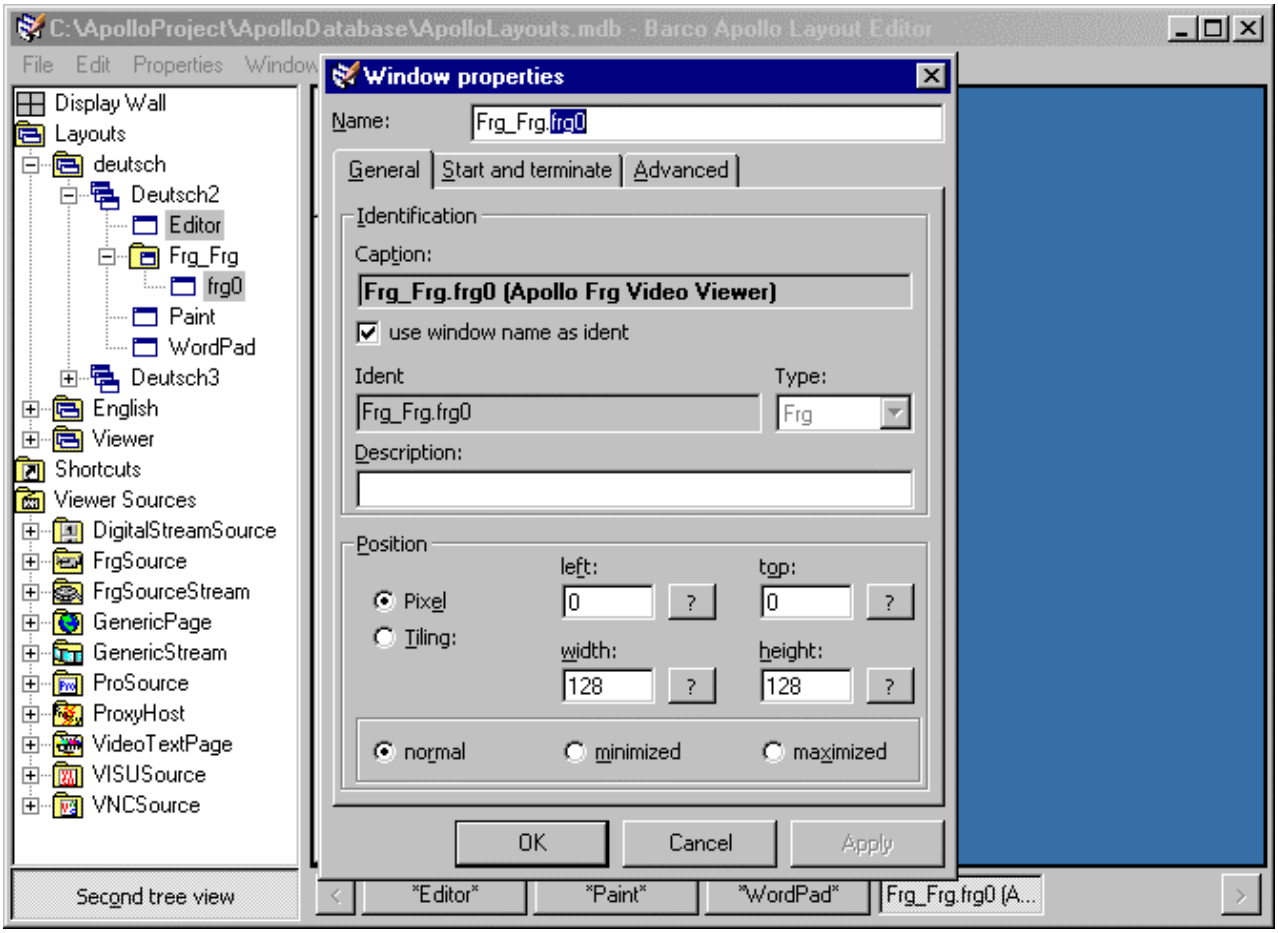
Select the desired viewer source and drag it in the tree view of the Apollo Layout editor.

When the desired layout entry is activated, release the mouse: the viewer source is inserted into this layout.

A viewer source inserted in a layout via drag&drop creates the respective viewer window with its associated shortcut and with the source requested parameter.

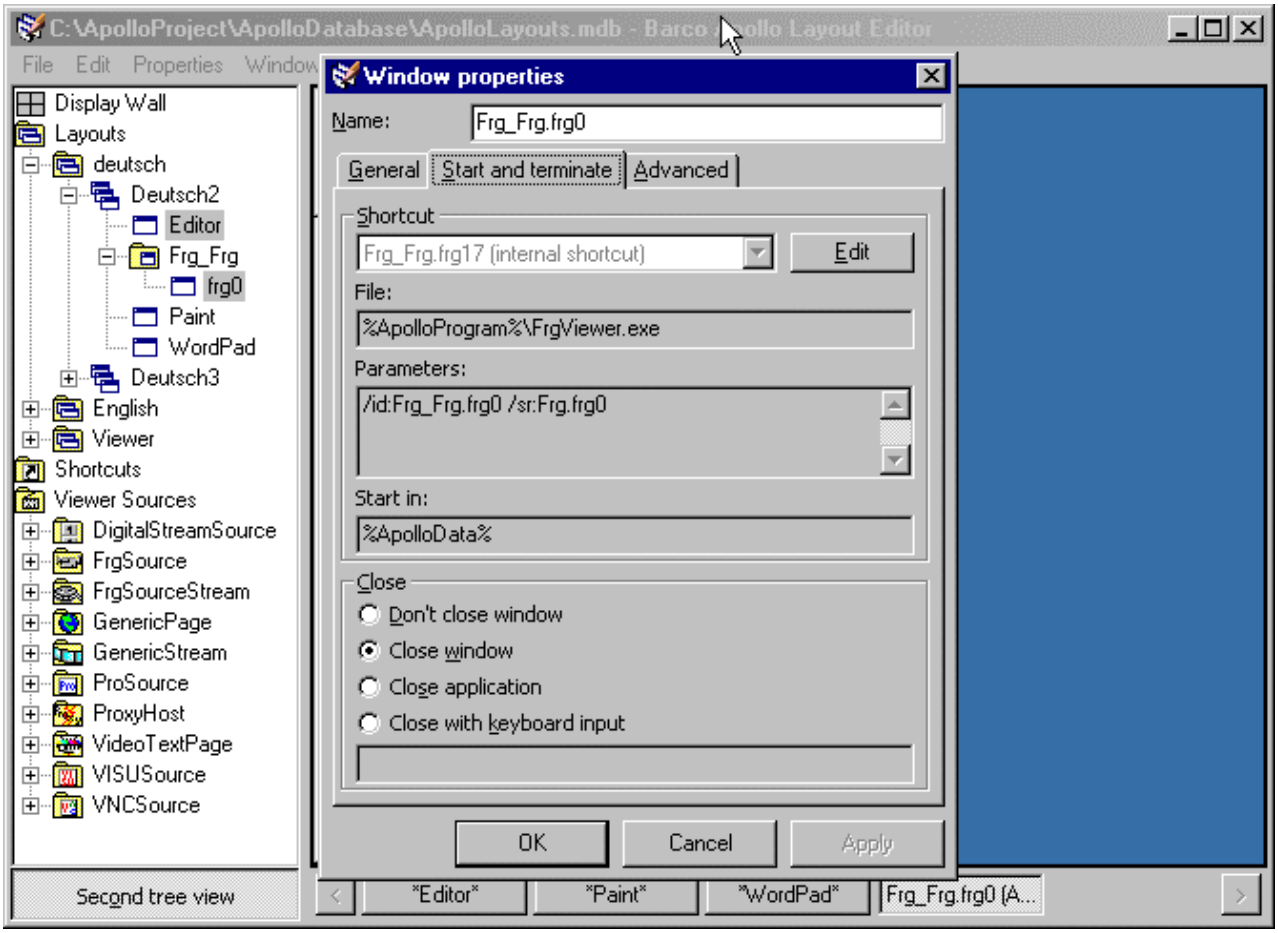


Subsequently the property pages of this viewer window pops up. As default, the names are counted starting from zero to the last window of this type. This name is used as viewer ident (check the respective option).

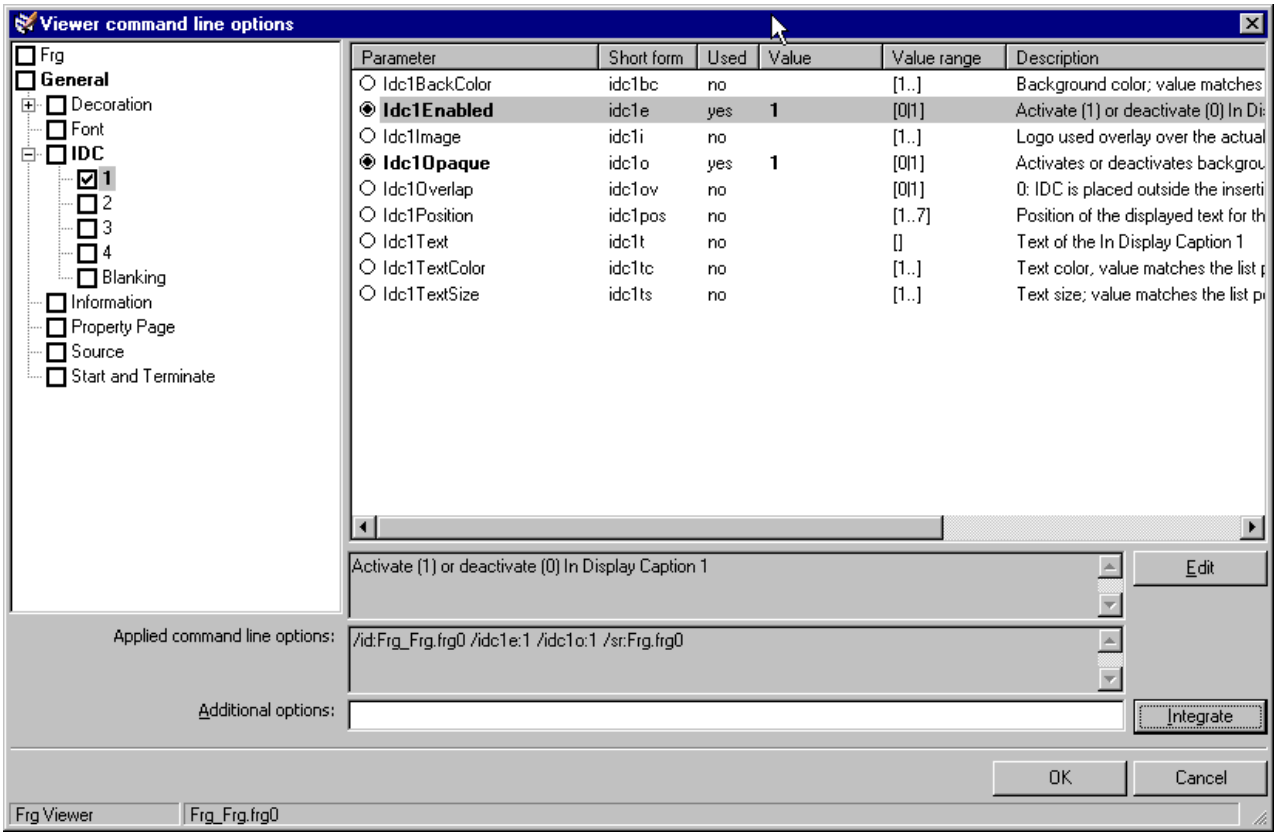


The type of window is indicated as **Frg**. Specify description, position and window state. Switch to the Start and terminate tab. You can see that the shortcut is indicated as internal shortcut (with a "real" shortcut, the window type would have been normal).

Click on **Edit** to define the viewer parameters.

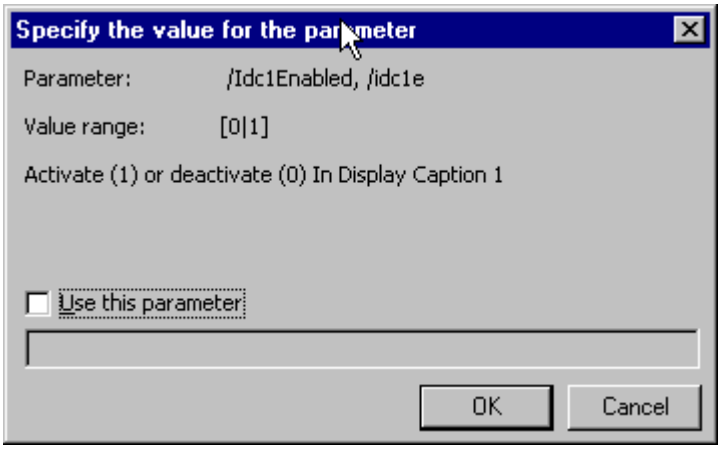


A dialog pops up where all the valid command line parameters of the viewer can be listed in the list view pane of this window. The list is populated according the selected objects in the tree view of this dialog.



On the list view, select the parameter you want to set. Double click to edit it, or click on the **Edit** button.

A dialog pops up:



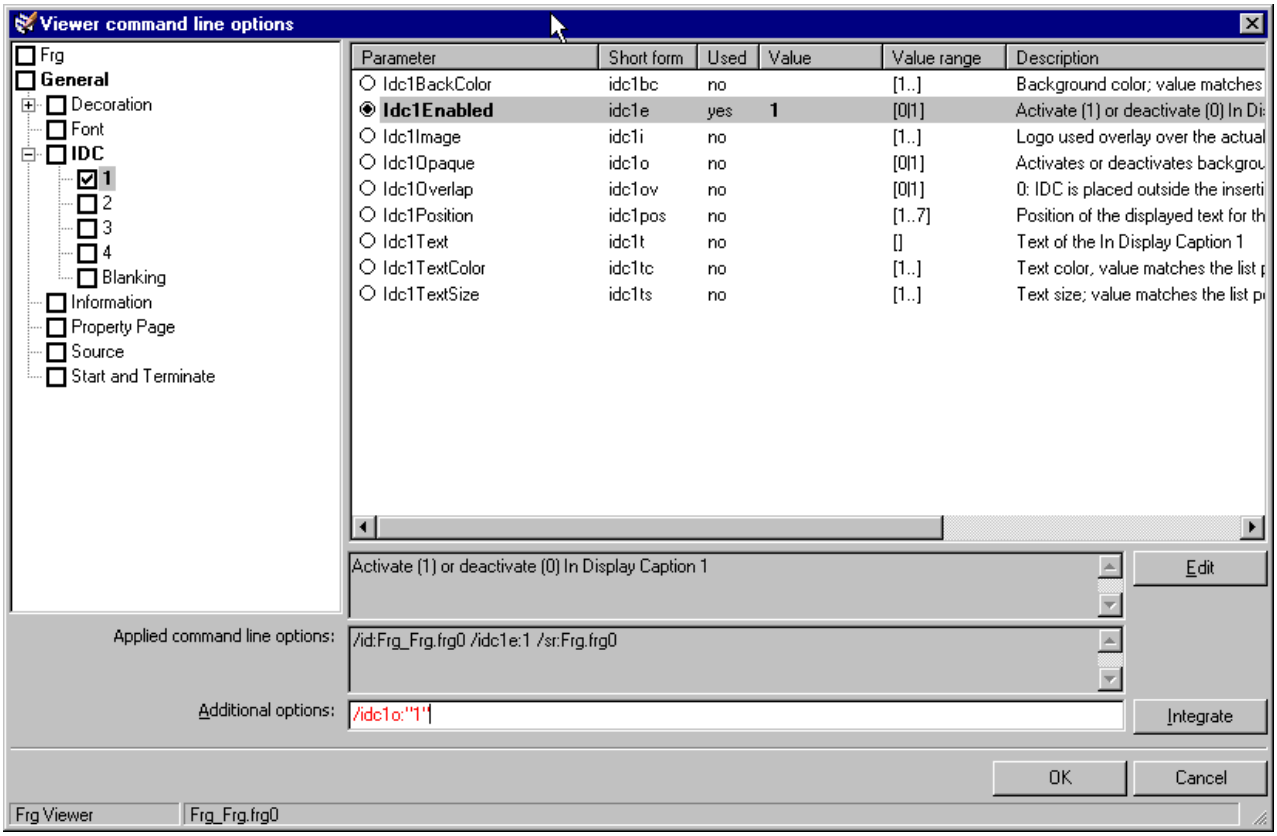
The range of values as well as their meaning is listed on the dialog.

Check **Use this parameter** to be able to enter the desired value.

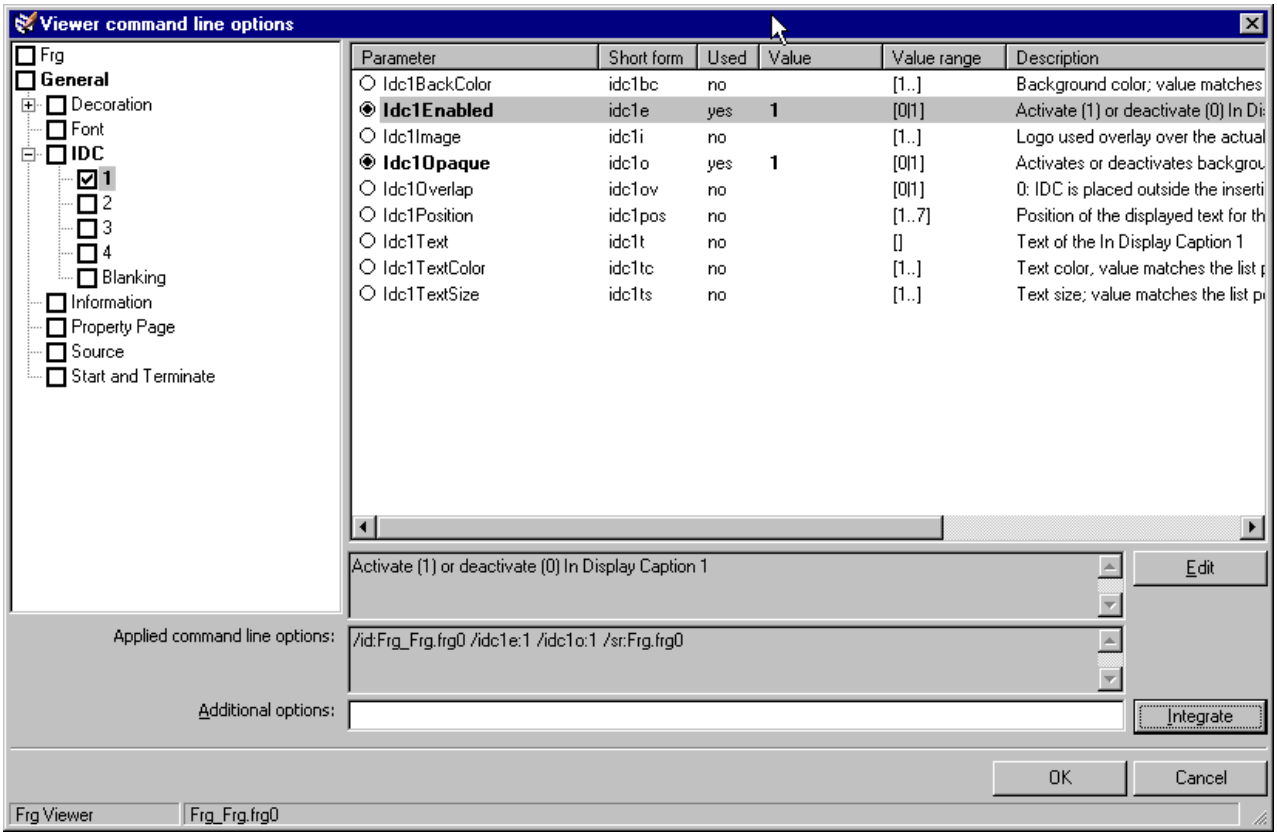
Click on **OK** to activate it.

In the list view, the respective value is entered, and the set parameter is indicated by a black dot.

It is also possible to enter the desired parameter and it's value manually by editing **Additional options**. The entered text is displayed red.



To activate this entry and to include it in the list of parameters click on the button **Integrate**. This will also clear the edit field.



To modify a value or to deactivate a parameter, edit the respective entry again and adjust it to your needs.

It is not possible to insert digital stream sources via drag&drop.

First a viewer source has to be inserted into the layout to provide a valid FRGviewer with its start parameters.

Subsequently the digital stream source can be dragged into the FRGviewer window.

To create identical parameter settings for multiple viewers, create one viewer window, specify the parameters, and then copy the window multiple times.

To see which parameters are applied, sort the list by clicking on the column caption **used** in the list view (clicking on a column caption will sort the entries using this criteria.

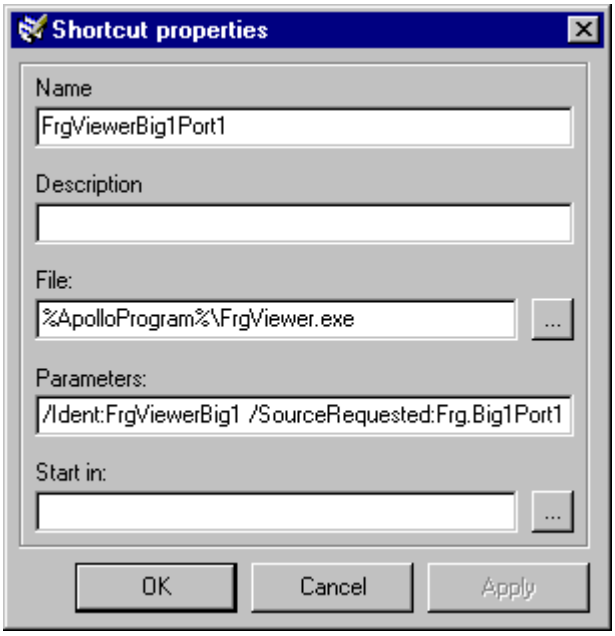
8.4.5 Preloading viewers

To reduce the time for the FRG viewers to display the desired source on the desired position with the desired decoration when being launched via loading a layout with these viewers, it is recommended to invisible preload these viewers.

For each instance of the viewer, the respective shortcut has to be defined in the database.

To define the viewer shortcut in the database, proceed as follows:

- Open the layout database.
- On the tree view, select the nod **Shortcuts**.
- Select **Edit|Insert Shortcut**
- The **Shortcut properties** dialog pops up. Specify all properties for the viewer



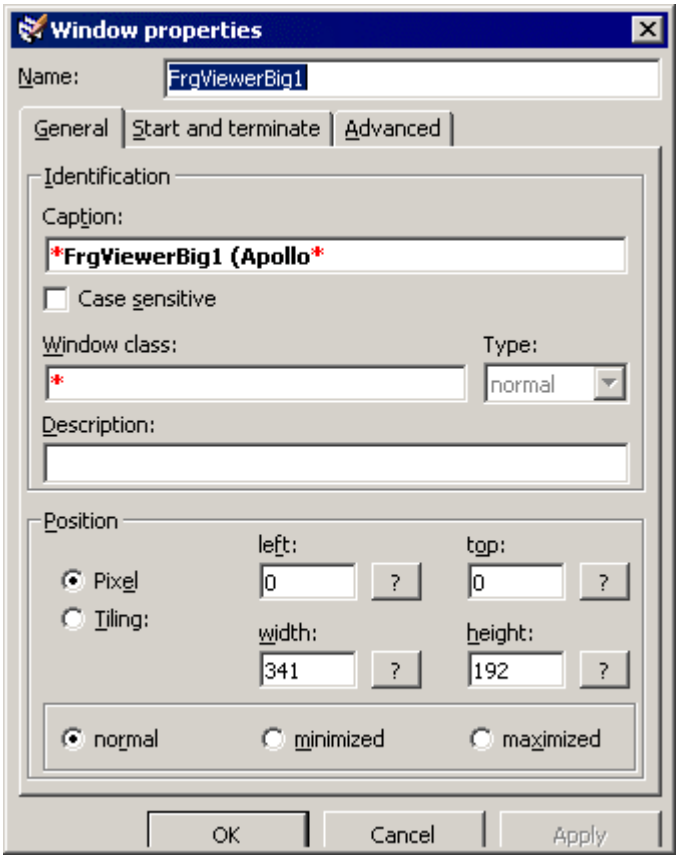
Now these shortcuts can be inserted into the various layouts.

To shorten the activation time when launching the FRG viewers, define a special invisible layout with the FRG viewers only.

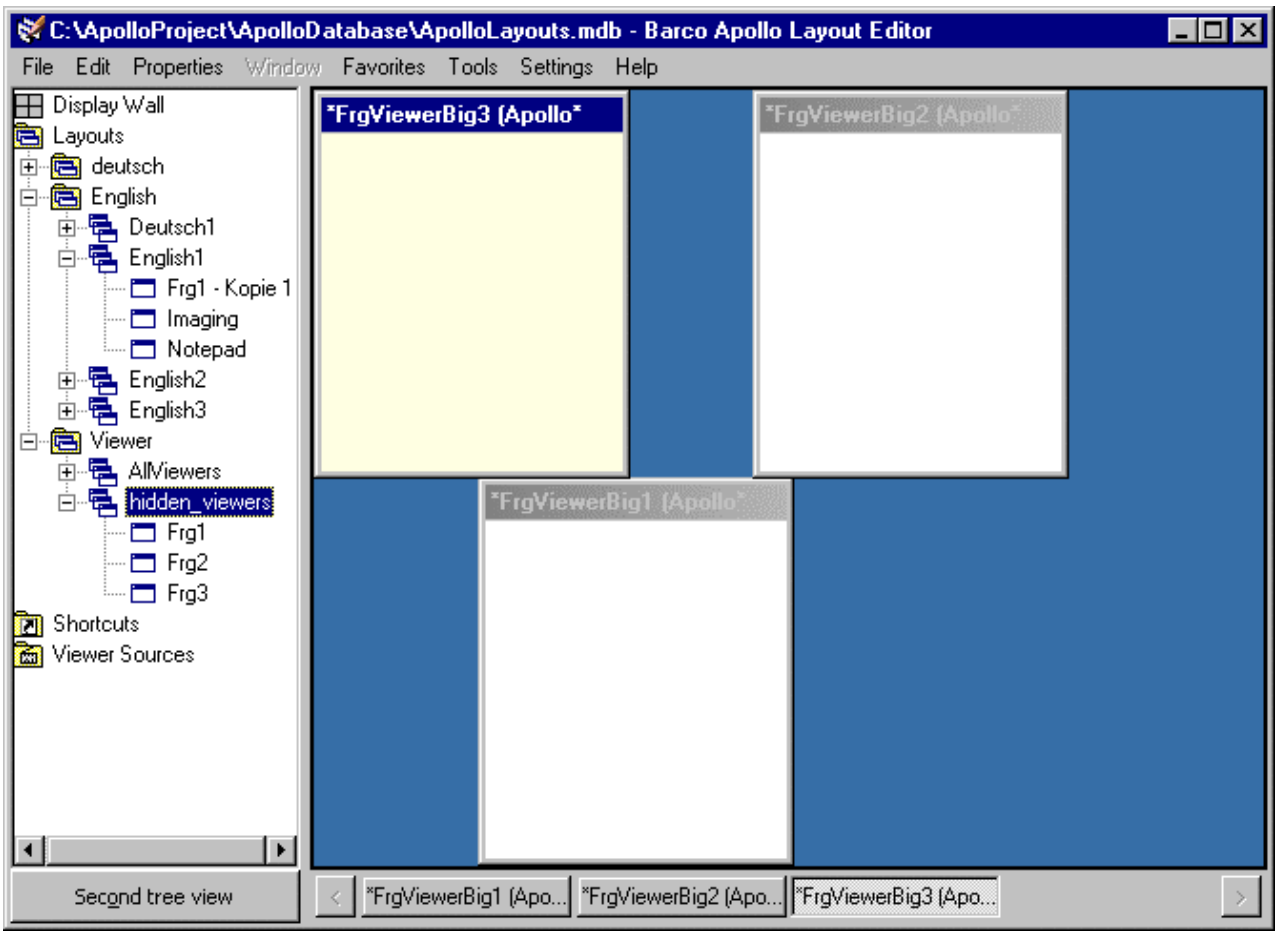
Insert a window for every FRG viewer in the project.

Define the window properties (position, window state, size) as desired.

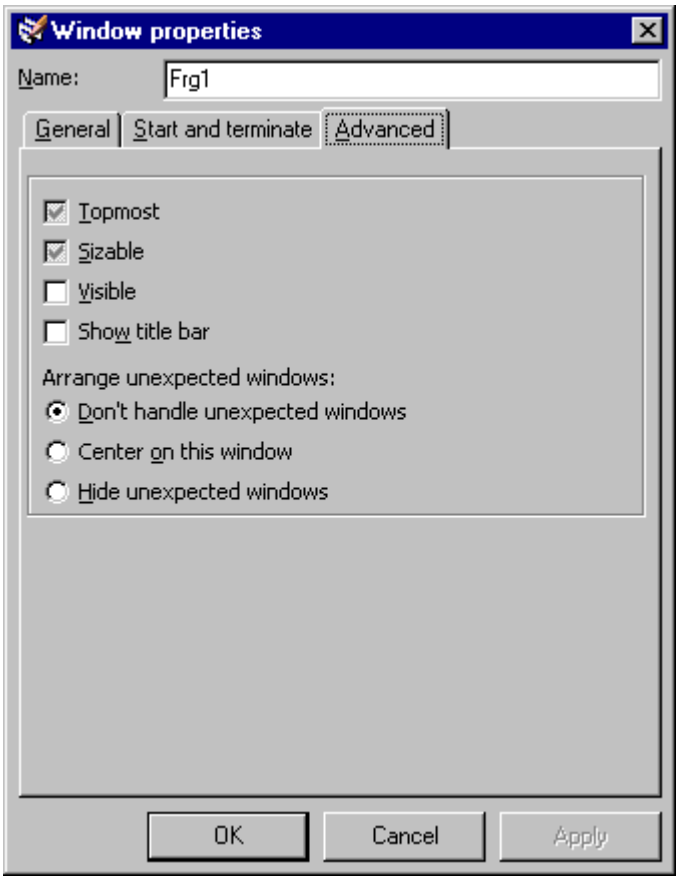
To save activation time when launching a viewer in a layout, the specified properties of the invisible viewer windows should completely be the same as required later, especially with respect to position, size and window state!



The layout hidden_viewer may look like this:



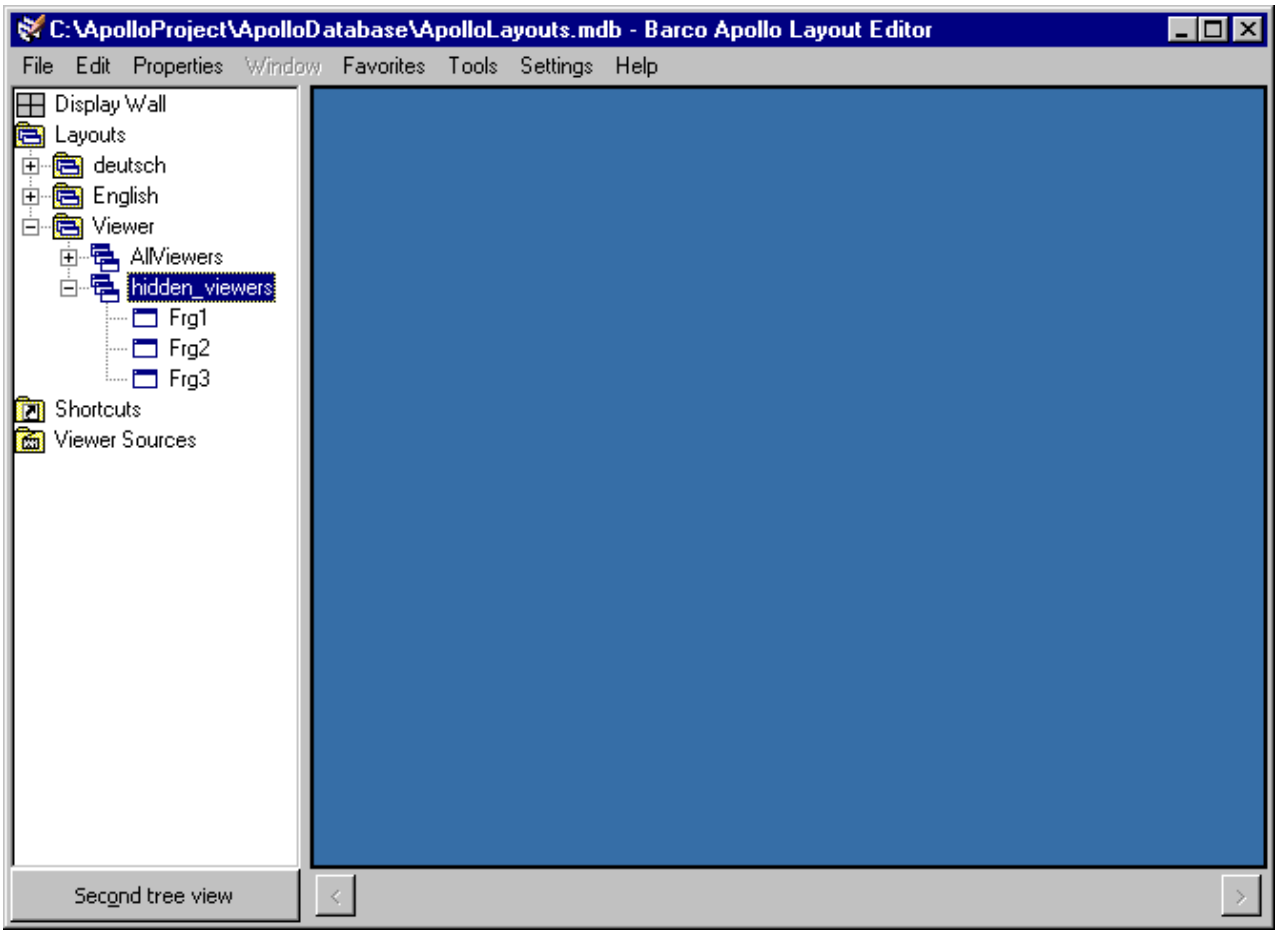
To launch the viewer invisible, it is essential to unselect the **Visible** checkbox on the Advanced Tab!



The Visible checkbox is a triple state checkbox. Make sure to remove the gray checkmark to launch the viewer window invisible!

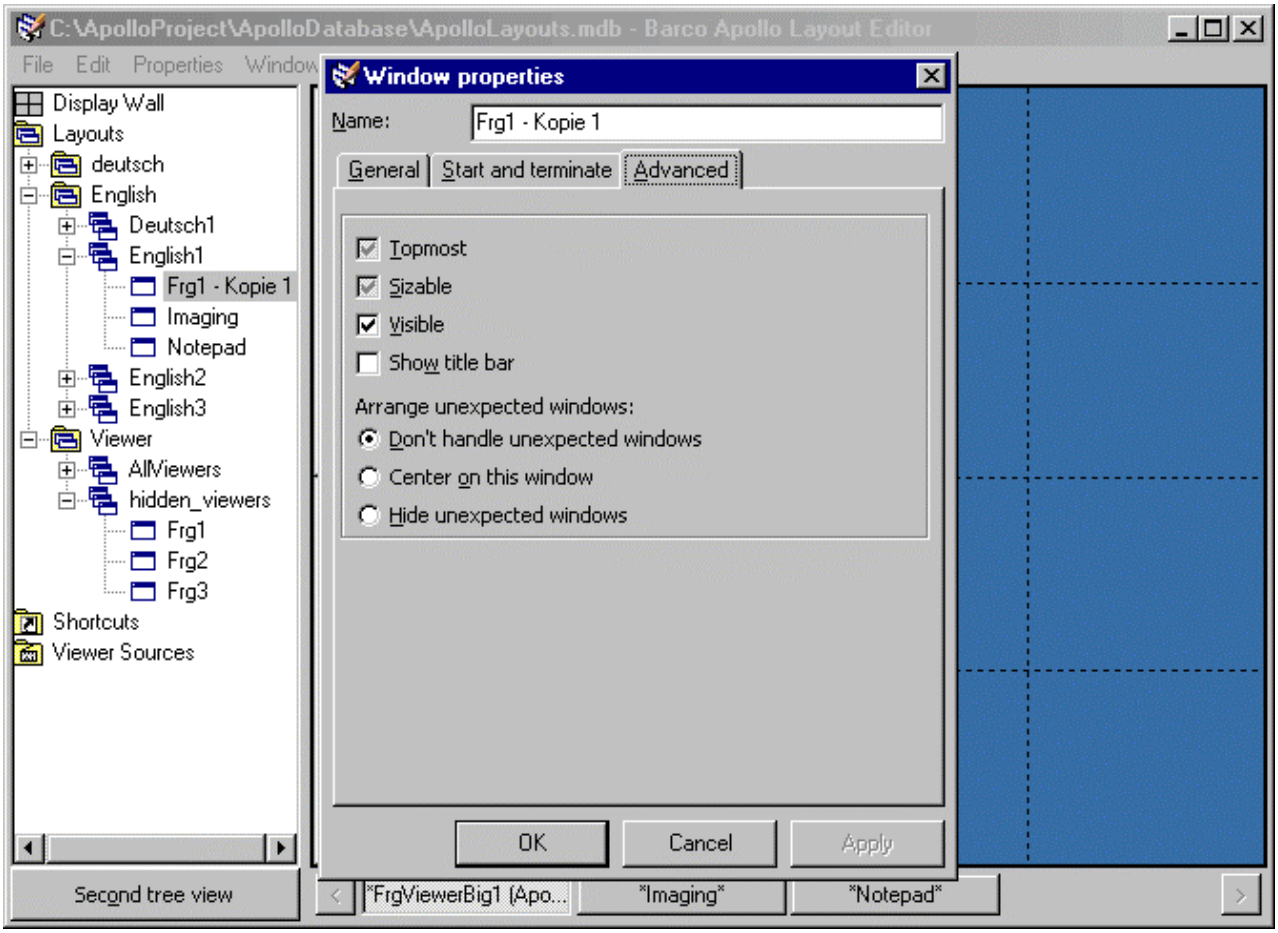
Likewise for all FRG viewers in the hidden layout.

If all the viewers are invisible, the layout doesn't show any windows:



To benefit from the preloaded viewer, copy the desired viewer window of the invisible layout and paste it into the desired layout. This guarantees that position, size etc. match.

To show the respective viewer window in a layout, the Visible checkbox on the Advanced tab has to be checked (black checkmark!)



Before launching any layout with an FRG viewer, launch the hidden layout!

Please note that the invisible layout is treated like all other layouts, e.g. the command Unload all layouts of the Layout Selector also unloads the invisible layout and thus closes the preloaded viewer applications.

To start them again without any delay in a layout, the invisible layout has to be explicitly launched again!

Saving layouts and shortcuts

Select Save from the File menu to save all shortcut and layout changes in the database. A copy of the database with the name ApolloDatabase.mdb.back is placed into the same directory before saving any changes.

Drag&Drop, shortcuts, context menu

Use Drag&Drop to insert windows and shortcuts in the TreeView. For a convenient handling click on the button Second tree view. This opens a 1:1 copy of the tree view and allows easy dragging of objects.

The commands Cut, Copy, Paste are also available by means of the Windows shortcuts Ctrl+X, Ctrl+C, Ctrl+V.

Right mouse click on an object displays the associated context menu and gives access to the respective edit commands. Context menus are available for the objects of the TreeView, of the Desktop, and of the task bar.

A window on the desktop has two context menus, one associated with the title bar, the other associated with the contents of the windows.

8.4.6 Valid command line options

Syntax: LyoutEditor.exe [/<option>:<value>][/<option>:<value>].

Option	Value	Meaning
/end		End the program
/fontname, /fnt	<font>	Set the main font
/fontsize, /fntsz	<size>	Set size of the main font
/height, /h	<height>	height of the main window
/help, /?		Show command options
/ident, /id	<name>	Starts the Layout Editor assigning the specified name. If an instance with this name is already running, this instance is activated and the command options are sent to it. The second instance is closed.
/labelfontname, /lblfnt	<font>	Set the font for the labels
/labelfontsize, /lblfntsz	<size>	Set size of the font for the labels
/left, /l	<left pos>	left coordinate of the main window
/splash, /spl		Shows the splash screen at startup of the program.
/top, /t	<top pos>	top coordinate of the main window
/width, /w	<width>	width of the main window

9 Desktop Server

After the **Desktop Server** has been launched, it will first determine which windows are currently open. Title, position, and size of each window are determined.

The window information is kept ready for subsequently started clients and passed on to them via the **Control Room Bus**.

9.1 Login

Users working with the servers and with the **Layout Editor** should have the required access rights for the central layout database.

9.2 Launching the Desktop Server

Before you can utilize the individual client applications, the **Desktop Server** has to be launched. The default setting launches and initializes the **Desktop Server** automatically when logging in on the control computer of the Display Wall. The initialized server is represented by a green icon.

After the **Desktop Server** has been launched, it will first determine which windows are currently open. Title, position, and size of each window are determined. This information is dynamically updated.

The window information is passed to the Control Room Bus and therefore at once available for the Apollo clients (**Layout Selector**, **Remote Desktop**) .

The **Layout Editor** can be used regardless whether the **Desktop Server** is activated or not.

9.2.1 Starting the Desktop Server manually

The **Desktop Server** is either automatically started when logging in (default setting) or started using the shortcut **Start | Programs | Barco Apollo | Settings**.

Close the **Settings** dialog with OK to start the **Control Room Bus** and the **Desktop Server**.

The icon of the **Desktop Servers** is initially displayed in red (taskbar).

The server is initialized after the splash screen disappears (after approx. 4 seconds). The initialized server is represented by a green icon..

9.2.1.1 Problems launching the Desktop Server

If the **Remote Control Bus** has not been started, the **Desktop Server** cannot be initialized and the following error message is returned:

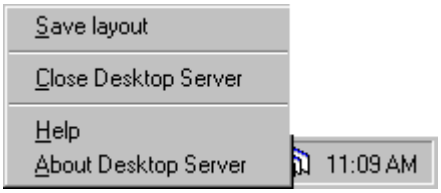
The red **Desktop Servers** icon is removed from the taskbar once you have acknowledged this error message.

Open the **Settings** program to manually start the **Control Room Bus**.

Close the **Settings** dialog with OK to start the **Control Room Bus** and the **Desktop Server**.

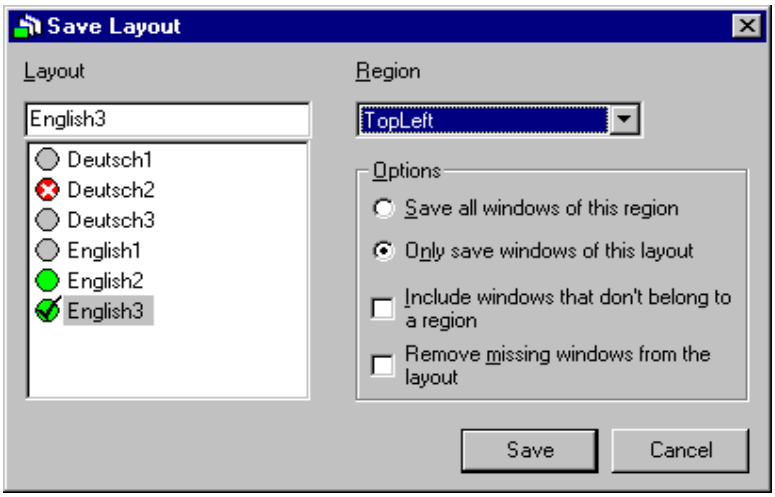
9.3 Closing the Desktop Server

To end the **Desktop Servers** use the **Close Desktop Server** command from the context menu (right mouse click on icon).



9.4 Saving layouts in the database

Changes made to the layout directly on the Display Wall can also directly be saved unlocked (shared) database. Just select **Save Layout** from the context menu of the **Desktop Server** (right mouse button). A dialog opens where you can save the changed layout or define a new one. The current arrangement of windows can be saved, without requiring a loaded layout.



A dialog opens where you can save the changed layout or define a new one. The current arrangement of windows can be saved, without requiring a loaded layout.

If no regions have been defined, the dialog for saving a layout resembles the one of the Apollo Explorer|Remote Desktop.

If a layout is loaded on the Display Wall, its name is suggested when saving, provided the selected region matches. If the region does not match, no name is suggested!

You can save the layout with a new name and thus add it to the database. .

You can save the layout in a new region, thus assigning a new category to it.

When saving a layout with a new name or in a new region, only the option **Include windows that don't belong to a region** can be checked or uncheck. This option refers to the windows which have not been launched by loading a layout

Should you want to save the layout using the same name, you can define if you want to save the windows of the respective layout only or additional windows (e.g. of another layout loaded into this region) (**Save all windows of this region, Only save windows of this layout)**, to include windows that don't belong to a region (**to include windows that don't belong to a region**) or whether to remove closed (missing) windows from the layout (**Remove missing windows from the layout**).

If a region is selected, the layouts which categories match (or which have the general category) are indicated by a green bullet. If in addition the layout is already loaded, then the green bullet gets ticked. In case there is no permission to save the layout (read only) , the layout is indicated by a red crossed bullet.

When entering a new name, or assigning an existing layout (name) to a new region, only the option **Include windows that don't belong to a region** is available.

Layouts should only be saved under an existing name when this layout is loaded on the Display Wall.

The following properties of a window are saved:

	new window	**window of the loaded layout**
Title	Yes	Yes (unchanged)
Window class	Yes	Yes (unchanged)
Shortcut	No	Yes (unchanged)
Position	Yes	Yes
size	Yes	Yes
Window state	Yes	Yes*)
description	Yes	yes
Category (selected region)	Yes	yes

If the title includes special characters, the layout has to be revised using the **Layout Editor**, see Identifying windows.

Use the **Layout Editor** to define the associated shortcut!

*)

If a layout has been loaded with invisible windows (i.e. the respective applications have not been launched yet), and is then saved as a new layout, the then invisible windows will be saved with window state MINIMIZED regardless of the assigned window state. To assign the desired window state, use the LayoutEditor, please!

Invisible windows of a layout will always be saved with window state minimized!

If a layout is saved as a new layout, the advanced options **Topmost, Sizable, Visible, Show title bar**, will be explicitly set or cleared, even if these options in the original layout are grayed. These options will be set as the Desktop server “sees” them.

Any locked database has to be unlocked by the **Desktop Server** before changes can be saved. Unlock a database with **Save and share Database** in the **Edit** menu of the **Layout Editor**

10 Project Backup

10.1 General

To backup an Apollo project, Apollo makes use of the backup tool of Windows 2000/Windows XP.

The Backup and Restore tool supports the plattforms Windows 2000 and Windows XP.

Windows NT is not supported!

Although Apollo makes use of a system tool of Windows, for creating a backup file which includes all Apollo specific settings (incl. registry keys etc.) it is recommended to start the backup process by means of the shortcut **Start|Programs|Barco Apollo|Project Backup.**

To backup an Apollo project, always use the shortcut Start|Programs|Barco Apollo|Project Backup.

To restore an Apollo project, double click on the backup file (*.bkf) or start the Windows Backup and Restore tool via the shortcut Start|Programs|Accessories|System Tools|Backup

The backup of an Apollo project comprises:

- Backup of the Apollo project folder
- Backup of user settings
- Backup of the RC Agent.ini file (in case of the Desktop Server only)
- Backup of the Switcher Language Compiler (SLC) configuration files (in case of the Desktop Server only)

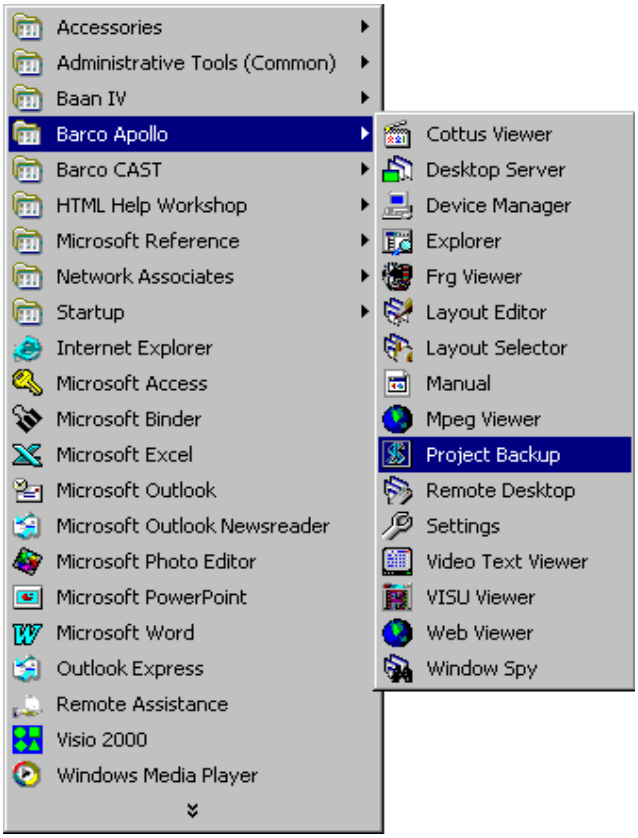
10.2 Creating the backup file

Before launching the Backup tool, make sure that all files of the Apollo project are closed! The Backup tool will skip all files in use!

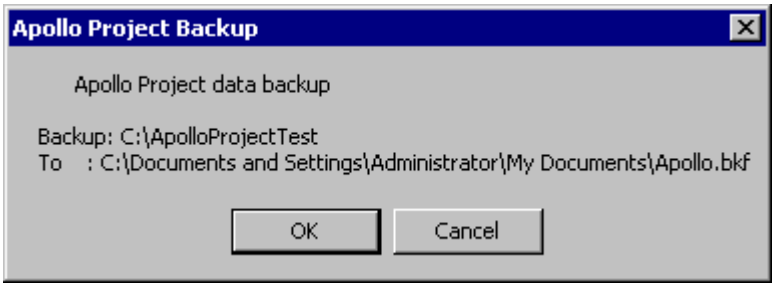
When the backup procedure is launched on a computer where an Apollo Desktop Server is activated, the Desktop Server must be terminated before starting the backup. Otherwise the Apollo Layout database will be regarded as "to be in use" and therefore be skipped!

For the same reason it is strongly recommended that no Apollo LayoutEditor has opened a layout database of an Apollo project which is intended to be backuped.

To backup the Apollo project, select **Start|Programs|Barco Apollo|Project Backup.**



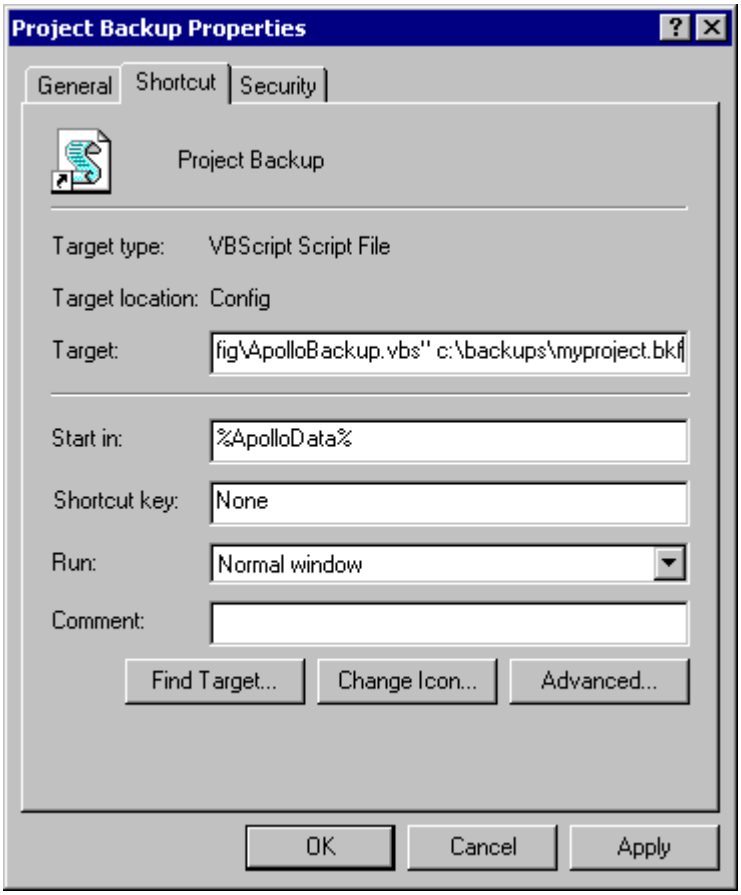
A dialog pops up which indicates the project of which the back up will be made as well as the entire file name and location of the backup file:



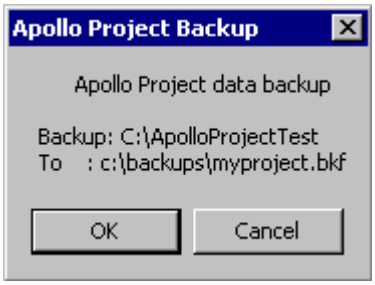
It is always the currently active project of which a backup is made (= the project which has been entered in the Apollo Settings dialog).

If not specified differently by means of a start parameter, as default the backup file will be located in the folder ...\Documents and Settings\username\My Documents.

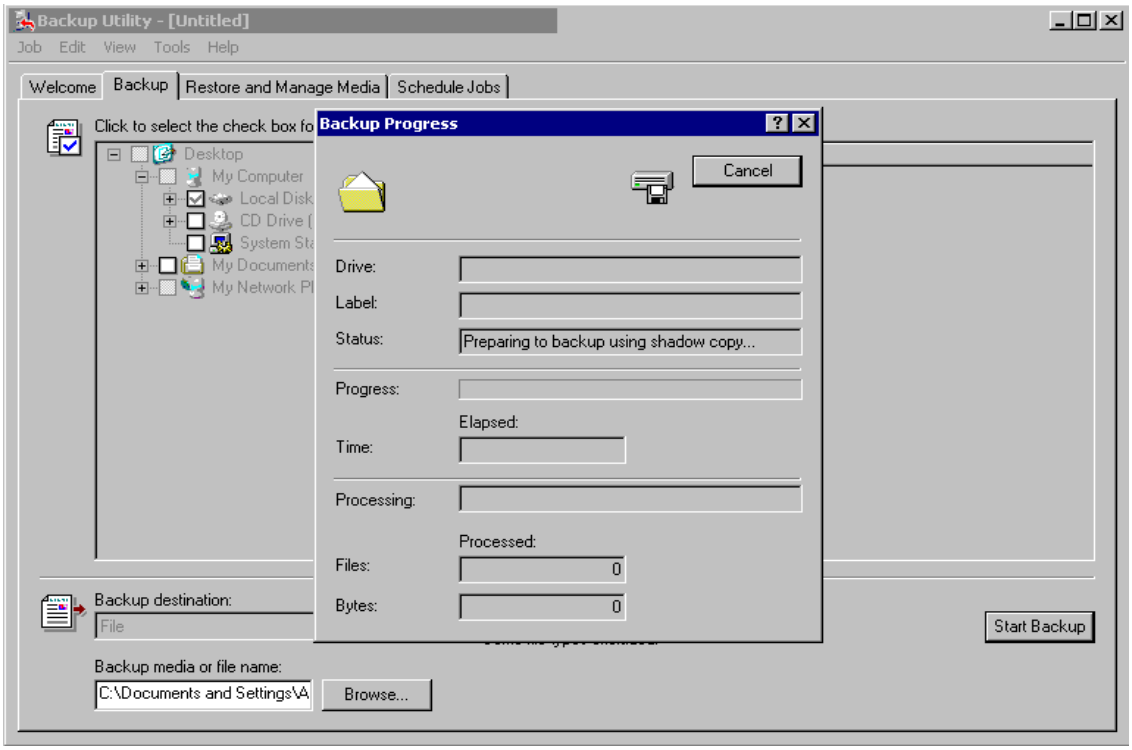
Project Backup can also be started with a start parameter which comprises the entire path and file name (with extension!) of the backup file. To make use of this functionality, create a shortcut of Project Backup (e.g. right click on the entry Start|Programs|Barco Apollo|Project Backup and drag it on the desktop). Then right click on the shortcut and select Properties. In the target field, add a space and then the desired path and file name.



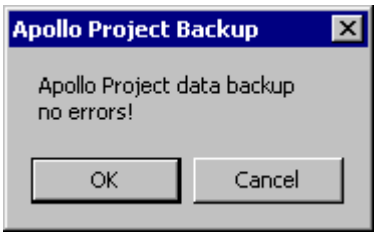
With this start parameter, location and name of the backup file can be adjusted to your needs:



Acknowledge of this dialog, starts the backup procedure. No access to the Windows Backup Wizard is given, the procedure runs on its own:



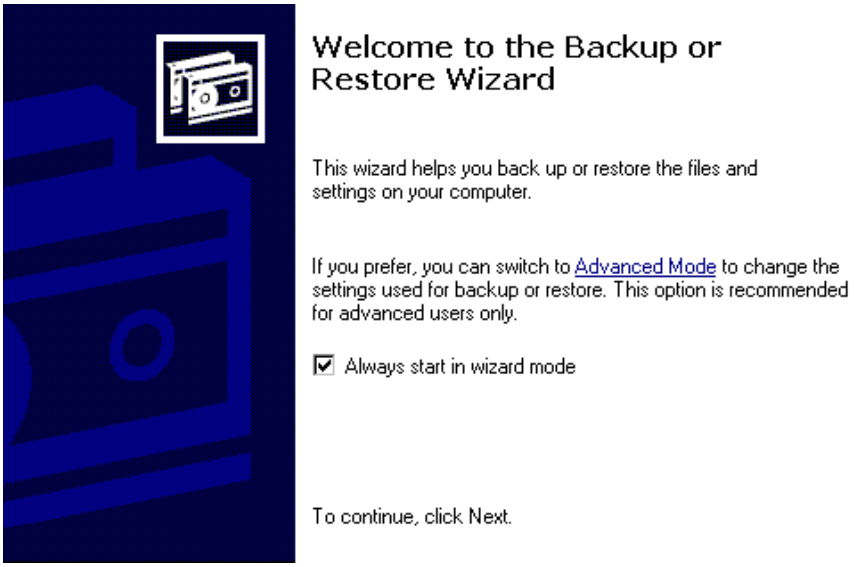
A message pops up to indicate the completion of the procedure:



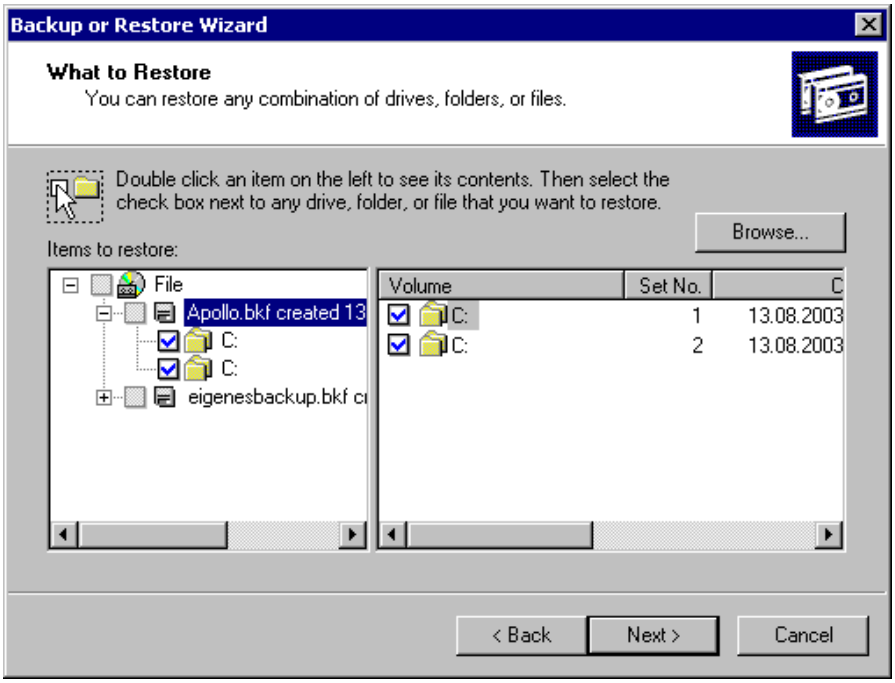
Store the backup file on a server where regularly a backup is made, and/or on a CD-ROM

10.3 Restoring an Apollo project

To restore an Apollo project, double click on the backup file of the project (*.bkf) or start the Windows Backup and Restore Tool via the shortcut **Start|Programs|Accessories|System Tools|Backup.**


Welcome to the Backup or Restore Wizard
This wizard helps you back up or restore the files and settings on your computer.
If you prefer, you can switch to Advanced Mode to change the settings used for backup or restore. This option is recommended for advanced users only.
Always start in wizard mode
To continue, click Next.

Follow the instructions of the Wizard.



Make sure to select all desired components of the backup file to be restored! In case you restore the project as a different user and/or on a different machine, you might want to skip the user settings (...\Documents and settings\username\Local settings\application data\apollo) or restore them into a different folder (in the Backup or Restore Wizard, click on the Advanced button and enter the desired location into the field Alternate location on the Where to Restore dialog).

After the project has been restored, you can start the Apollo project by selecting it in the **Apollo Settings** dialog. Launch the dialog by means of the shortcut **Start|Programs|BarcoApollo|Settings.**

11 Command Interface

11.1 Device command Interface

This Apollo component is available only if the TransForm A has been equipped with this software component in the Visio file.

This component is provided on every operator workstation.

Device Command Interface is a WindowsNT/2000 application, which converts command line input to control commands for the devices.

Start MS-DOS and enter the desired command behind the prompt. The general syntax is as follows:

devicecmd -name:<devname> {-<specifier>[:<value>]}

<devname>	Complete device name (as depicted in the Tree View of the **Device Manager**).
<specifier>	Name of a (usually device-specific) argument
<value>	Value of an argument.

Apollo Rel. 1.6 supports the devices of the OverView D series, OverView-mP50, Atlas67C4, Atlas67CS4, Atlas84CS4, S70, BR6xxx, BG6xxx, Hermes D2D, Hermes V2A, Visu, Matrix Switcher and the Serial Interface.

The following table provides an overview over the device-specific commands and parameters:

The specifiers and values are not case sensitive!

Device	Specifier	Value
Atlas67CS4, Atlas84CS4, S70, BRxxx, BGxxx	ProjectorStandBy (psb)	True | false
	IncBrightness (ibr)	+ |- value
	Brightness (br)	Value
	Contrast (co)	Value
	IncContrast (ico)	+ |- value
	PictureFreeze (picf)	True |false
	VideoMute (vm)	True |false
	Restore (rst)	File name
	Backup (bck)	File name
	ActiveSourceSlot (ass)	value
	LampOnOff (loo)	On | Off
Phoenix DX	IncBrightnessRed (ibrr)	+ |- value
	IncBrightnessGreen (ibrg)	+ |- value
	IncBrightnessBlue (ibrb)	+ |- value
	BrightnessRed (brr)	Value
	BrightnessGreen (brg)	Value

Device	Specifier	Value
	BrightnessBlue (brb)	Value
	ContrastRed (cor)	Value
	ContrastGreen (cog)	Value
	ContrastBlue (cob)	Value
	IncContrastRed (icor)	+ |- value
	IncContrastGreen (icog)	+ |- value
	IncContrastBlue (icob)	+ |- value
	LampOnOff (loo)	On | Off
OverView-mP50, Atlas67C4, Atlas84C4	LampOnOff (loo)	On | Off
OverView D	LampOnOff (loo)	On | Off
	ActiveLamp (al)	Top | Bottom
	BrightnessTarget (brt)	[0-16384]
	InfraredOnOff (iroo)	On | Off
	LampMode (lm)	hot_standby | cold_standby | auto_switch
	OptimizeMirror (om)	[1]
For OverView D with 2xDVI	SourceSlotSelectionMode (sssm)	[1,2,3] 1: auto 2: manual 3: autoSwitch
For OverView D with 2xDV	ActiveSourceSlot (ass)	[1,2]
OverView cPU67-DL	LampOnOff (loo)	On | Off
	ActiveLamp (al)	Top | Bottom
	ActiveSourceSlot (ASS)	1-BNC, 2-BNC, 3-Composite, 4-SVideo, 5-DVI, 7-SDI, 9-Logo
	LampMode (lm)	hot_standby | cold_standby | auto_switch
	Picture Freeze (picf)	True | False
Hermes D2D	SwitchBoxInput (sbi)	Digital1 | Digital 2
Hermes V2A	SwitchBoxInput (sbi)	Digital | Analog
Matrix Switcher*	Output (out)	value
	Input (inp)	value
SerialInterface	Send (send)	Characters to be send to the serial interface, binary data is entered as escape sequences, cf. Escape sequences supported by the send command of the Serial Interface

The following example shows the command for turning on the lamp of an OverView-mP50 projection module

"%ApolloProgram%\devicecmd.exe" -name:Wall1.Module1x1 -LampOnOff:on

The following example sends "Hallo World" to the serial interface:

"%ApolloProgram%\devicecmd.exe" -name:Wall1.Port1 -Send:"Hallo World"

❖

With Matrix Switcher, please mind the sequence of the commands, FIRST outputs, then Input.

The following command switches Input 3 to Output 3

"%ApolloProgram%\devicecmd.exe" -name:<switcher name> -Output:3 –Input:3

11.2 Desktop command Interface

This Apollo component is available only if the TransForm A has been equipped with this software component in the Visio file.

This component is provided on every operator workstation.

Desktop Command Interface is a WindowsNT/2000 application, which converts command line input to control commands for the devices.

Start MS-DOS and enter the desired command behind the prompt. The general syntax is as follows:

DesktopCmd -name:<desktop server> -<command>:<value>

The commands and values are not case sensitive!

The following table provides an overview over the available commands and parameters:

Command	Parameter	Parameter
LayoutLoad	Region	Layout Name
LayoutUnload	Region	Layout Name
LayoutUnloadAll	Region	
Shortcut	Region	Shortcut Name

If no regions are defined, the parameter region has to be omitted!

The following example shows the command for loading the layout with the name English 1 in the region .

“%ApolloProgram%\DesktopCmd.exe” -name:Wall1 –Region: Region1 -LayoutLoad:English1

The region has to be specified, otherwise "Default" region is taken.

Only one command per command line!

Starting with Apollo 1.4SR3, also shortnames of the commands are supported:

Command	shortname
LayoutLoad	ll
LayoutUnload	lul
LayoutUnloadAll	lula
Shortcut	shrtc

11.3 Viewer command Interface

Viewer Command Interface is a Windows NT/2000 application converting command line input into control commands for the viewers.

Start MS-DOS and enter the desired command behind the prompt. The general command syntax is as follows:

viewercmd -name:<Ident> {-<specifier>[:<value>]}

<Ident>	The complete device name (as listed in the tree view of the **Apollo Explorer**)
<specifier>	Name of a parameter
<value>	Value of a parameter

Please find the list of parameters and their values in Global Viewer Parameters and in the viewer specific sub chapters.

Since Apollo1.7 the viewer buffers all parameters from a command line, or several command lines, until the command line contains a 'SourceRequested' (sr) or 'SourceConnected' (sc) parameter. If one of these two parameters are specified, then all previous parameter including the sr/sc parameter are execute in one cycle!

To connect to a new source, use the source requested parameter in the usual way, specify the new source, and the viewer will connect to this source! (SourceRequested:<new source>)

Every time you want the viewer to execute the transferred command line parameter, use this command to complete the command line.

Examples:

Make the caption visible:

viewercmd.exe /name:<viewer ident> /CaptionVisible:1 /sc:<some text>

Remove caption, status bar and border:

viewercmd.exe /name:<viewer ident> /CaptionVisible:0 /BorderVisible:0 /StatusBarVisible:0 /sc:<some text>

11.4 Apollo Explorer command interface

Please see the chapter in the Apollo Explorer section, Valid Command line options

11.5 Apollo Layout Editor command interface

Please see the chapter in the Apollo Layout Editor section.

11.6 Apollo Layout Selector command interface

Syntax: LayoutSelector.exe [/<option>:<value>][/<option>:<value>].

Option	Value	Meaning
/help, /?		Show command options
/ident, /id	<name>	Starts an instance of the program assigning the specified name. If an instance with this name is already running, this instance is activated and the command options are sent to it. The second instance is closed.
/splash, /spl		Shows the splash screen at startup of the program.
/left, /l	<left pos>	left coordinate of the main window
/top, /t	<top pos>	top coordinate of the main window
/width, /w	<width>	width of the main window
/height, /h	<height>	height of the main window
/fontname, /fnt	<font>	Set the main font
/fontsize, /fntsz	<size>	Set size of the main font
/labelfontname, /lblfnt	<font>	Set the font for the labels
/labelfontsize, /lblfntsz	<size>	Set size of the font for the labels
/end		End the program

11.7 Apollo Remote Desktop command interface

Syntax: RemoteDesktop.exe [/<option>:<value>][/<option>:<value>].

Option	Value	Meaning
/help, /?		Show command options
/ident, /id	<name>	Starts an instance of the program assigning the specified name. If an instance with this name is already running, this instance is activated and the command options are sent to it. The second instance is closed.
/splash, /spl		Shows the splash screen at startup of the program..
/left, /l	<left pos>	left coordinate of the main window
/top, /t	<top pos>	top coordinate of the main window
/width, /w	<width>	width of the main window
/height, /h	<height>	height of the main window
/fontname, /fnt	<font>	Set the main font
/fontsize, /fntsz	<size>	Set size of the main font
/labelfontname, /lblfnt	<font>	Set the font for the labels
/labelfontsize, /lblfntsz	<size>	Set size of the font for the labels
/end		End the program

11.8 Apollo Database Convertor command interface

Syntax: DatabaseConvertor.exe [/<option>:<value>][/<option>:<value>].

Option	Value	Meaning
/help, /?		Show command options
/ident, /id	<name>	Starts an instance of the program assigning the specified name. If an instance with this name is already running, this instance is activated and the command options are sent to it. The second instance is closed.
/splash, /spl		Shows the splash screen at startup of the program.
/database, /db	<file>	Selects the specified layout database
/left, /l	<left pos>	left coordinate of the main window
/top, /t	<top pos>	top coordinate of the main window
/width, /w	<width>	width of the main window
/height, /h	<height>	height of the main window
/fontname, /fnt	<font>	Set the main font
/fontsize, /fntsz	<size>	Set size of the main font
/labelfontname, /lblfnt	<font>	Set the font for the labels
/labelfontsize, /lblfntsz	<size>	Set size of the font for the labels
/end		End the program

11.9 Apollo Window Detector command interface

Syntax: WindowDetector.exe [/<option>:<value>][/<option>:<value>].

Option	Value	Meaning
/help, /?		Show command options
/ident, /id	<name>	Starts an instance of the program assigning the specified name. If an instance with this name is already running, this instance is activated and the command options are sent to it. The second instance is closed.
/splash, /spl		Shows the splash screen at startup of the program.
/left, /l	<left pos>	left coordinate of the main window
/top, /t	<top pos>	top coordinate of the main window
/width, /w	<width>	width of the main window
/height, /h	<height>	height of the main window
/fontname, /fnt	<font>	Set the main font
/fontsize, /fntsz	<size>	Set size of the main font
/labelfontname, /lblfnt	<font>	Set the font for the labels
/labelfontsize, /lblfntsz	<size>	Set size of the font for the labels
/end		End the program

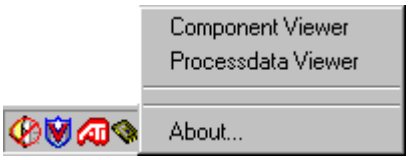
12 Control Room Bus services

12.1 Control Room Bus

To run the Apollo software, you have to first set up the **Control Room Bus** on each computer. Then you can start the respective applications.

The **Control Room Bus** starts automatically when the computer is booting. The following icon appears in the taskbar.

Click with the right mouse on the **Control Room Bus** icon to open the context menu::



Use **Component Viewer** to see a list of all the networked computers the desktop server can access.

Use **Process Data Viewer** to view control room database data. This option can be used by system engineers when initially starting the system but requires expert knowledge about the database structure.

About informs about the software.

12.2 Serial command interface

This Apollo component is available only if the TransForm A has been connected with the **Command Source** (shape in Barco 3rd Party Devices) in the Visio file. **Serial Port** and **baud rate** are defined via the related Custom Properties of the connected **TransForm A**.

Serial Command Interface makes it possible to connect Apollo with external systems. **Serial Command Interface** receives data via the serial interface (COM port) and converts it to Apollo-specific commands.

The **Serial Command Interface** represents a device which can be controlled via the **Device Command**. As for all devices, it has to be configured in the **Apollo Control Room Configurator** (shape: **Command Source**). When exporting the Visio drawing, the respective **ini-file** is created and has, like all other configuration files, to be copied to the Apollo Project.

12.2.1 Customizing configuration files

If the Apollo Project comprises the **SerialCommandInterface** (the shape **Command Source** is part of the respective Visio drawing), then starting the project by means of Apollo Settings will create the file **SerialCommandInterface.ini** in the project folder (provided this file does not exist in this folder yet).

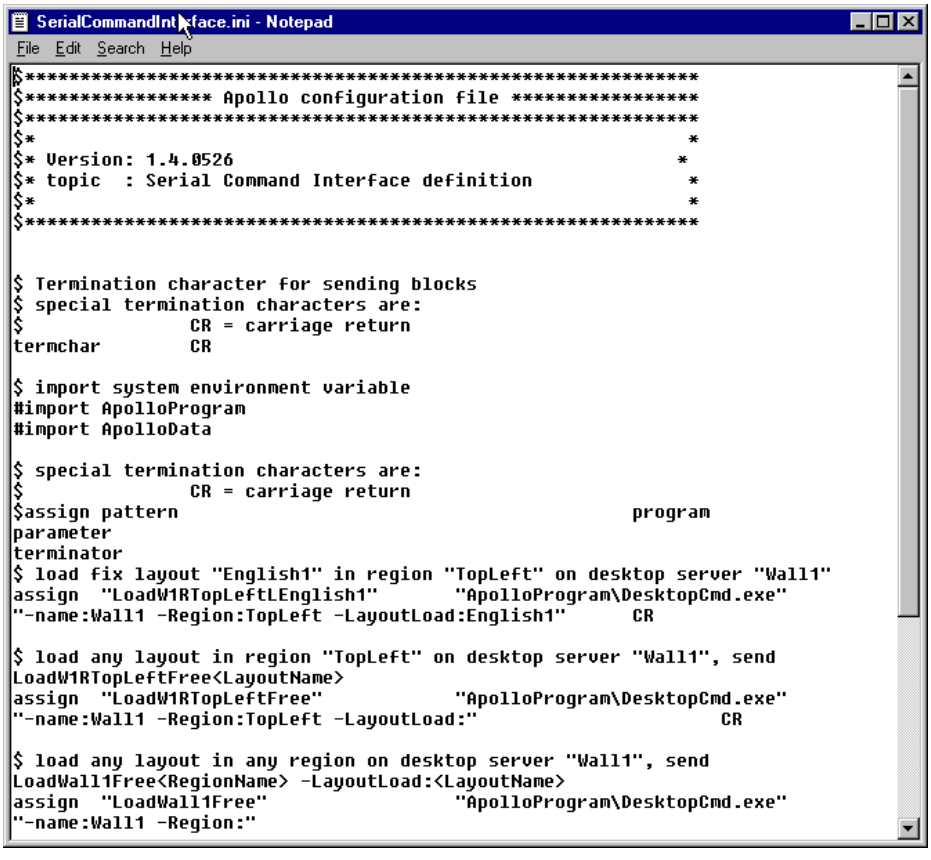
Open the file with a text editor and adjust the command allocation sample as necessary.

Starting with Apollo 1.4SR1, the baud rate and the serial port are specified via the Control Room Configurator in the SerialCommandInterfaceBasic.ini.

If the file SerialCommandInterface.ini has been created with former Apollo releases, the entries referring to the COM Port and the baudrate have to be deleted manually!

If the SerialCommandInterface.ini does not match the current configuration, the application is terminated, and a log entry is made. To check whether the application is running or not, right click on the icon of the Control Room Bus in the status bar and select Component Viewer.

If the configuration file includes a wrong syntax, Notepad opens and shows the line in question.


SerialCommandInterface.ini - Notepad
File Edit Search Help
$***
$***************** Apollo configuration file *****************
$***
$*   *
$* Version: 1.4.0526   *
$* topic : Serial Command Interface definition   *
$*   *
$***
$ Termination character for sending blocks
$ special termination characters are:
$ CR = carriage return
termchar CR
$ import system environment variable
#import ApolloProgram
#import ApolloData
$ special termination characters are:
$ CR = carriage return
$assign pattern program
parameter
terminator
$ load fix layout "English1" in region "TopLeft" on desktop server "Wall1"
assign "LoadW1RTopLeftLEnglish1" "ApolloProgram\DesktopCmd.exe"
"-name:Wall1 -Region:TopLeft -LayoutLoad:English1" CR
$ load any layout in region "TopLeft" on desktop server "Wall1", send
LoadW1RTopLeftFree<LayoutName>
assign "LoadW1RTopLeftFree" "ApolloProgram\DesktopCmd.exe"
"-name:Wall1 -Region:TopLeft -LayoutLoad:" CR
$ load any layout in any region on desktop server "Wall1", send
LoadWall1Free<RegionName> -LayoutLoad:<LayoutName>
assign "LoadWall1Free" "ApolloProgram\DesktopCmd.exe"
"-name:Wall1 -Region:"

12.2.2 Mode of operation

Data received via the serial interface are stored by the application until the character indicating the end of the command has been received as well (**terminator**). The application then compares all samples saved in **SerialCommandInterface.ini** with the received data. In case of a match, the program launches the corresponding application with the configured parameters.

Example:

Configuration:

$assign pattern program parameter terminator

assign "LoadFree" "ApolloProgram\DesktopCmd.exe" "-name:" CR

string sent:

„LoadFree Wall1 –region:Left –LoadLayout:English1<CR>“

The program launches the application "ApolloProgram\DesktopCmd.exe" with the parameters „-name:Wall1 –region:Left –LoadLayout:English1“

In case the SerialCommandInterface.ini file includes a wrong configuration, the process is terminated, and the respective entry into the log-file is written.

After startup of Apollo, there is a short period in which the Desktop Command interface is not ready yet. Make sure that you only send commands via the serial command interface when the Desktop Command has been started by Apollo (you can check this by clicking onto the Control Room Bus icon in the status bar and then selecting Component Viewer.

If the Desktop Command interface is not yet ready, and commands are sent via the SerialCommandInterface, the SerialCommandInterface will start an own instance of the Desktop Command Interface, thus running a second instance of this service. This is a very instable situation; you have to stop both Desktop Command instances using the Windows TaskManager. The next serial command will restart the DesktopCmd and the system will function again.

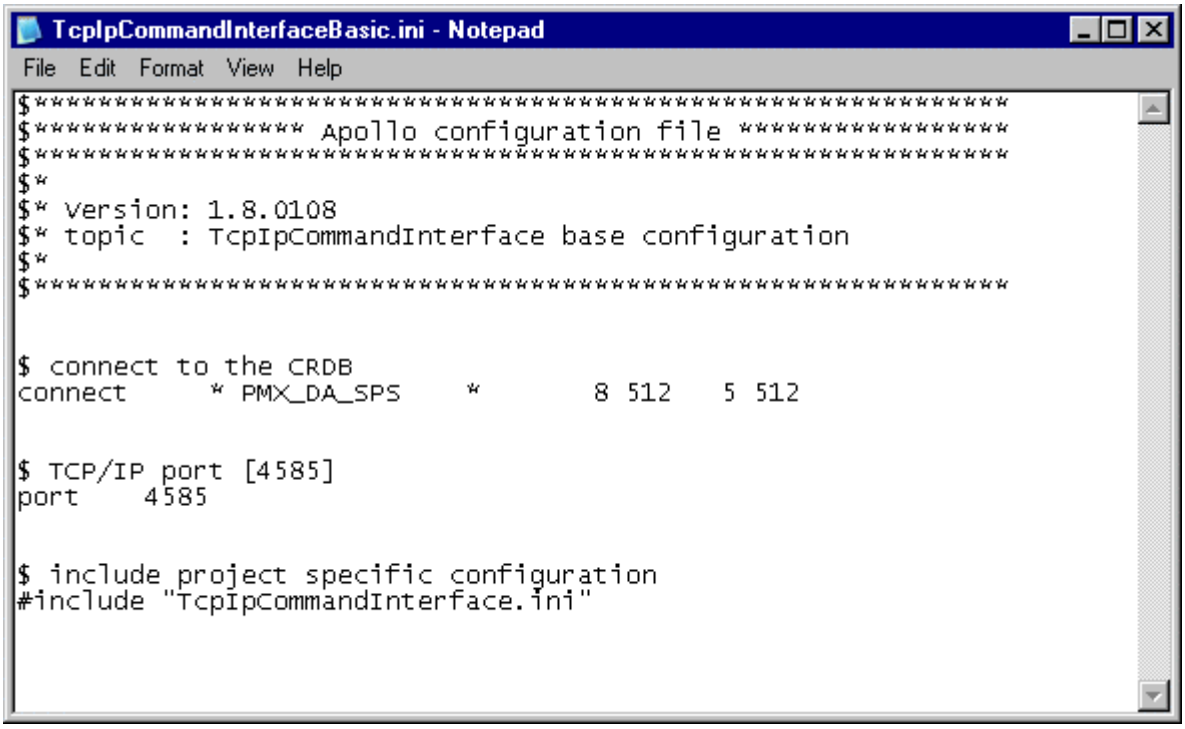
12.3 TCPIP command interface

This Apollo component is available only if the TransForm A has been connected with the **Command Source** (shape in Barco 3rd Party Devices) in the Visio file.

TCPIP Command Interface makes it possible to connect Apollo with external systems. **TCPIP Command Interface** receives data via the Ethernet interface and converts it to Apollo-specific commands.

TCPIP Command Interface uses the default LAN connection. Port is set to 4585. In case a different port has to be used, enter desired port in the shape of TCP command in the Control Room Configurator. Make sure then that this port is opened (firewall).

You may also edit the file TCPCommandInterfaceBasic.ini



The **TCPIP Command Interface** represents a device which can be controlled via the **Device Command**. As for all devices, it has to be configured in the **Apollo Control Room Configurator** (shape: **TCP CMD**). When exporting the Visio drawing, the respective **ini-file** is created and has, like all other configuration files, to be copied to the Apollo Project.

12.3.1 Mode of operation

Data received via the LAN interface are stored by the application until the character indicating the end of the command has been received as well (**terminator**). The application then compares all samples saved in **TCPCommandInterface.ini** with the received data. In case of a match, the program launches the corresponding application with the configured parameters.

Example:

Configuration:

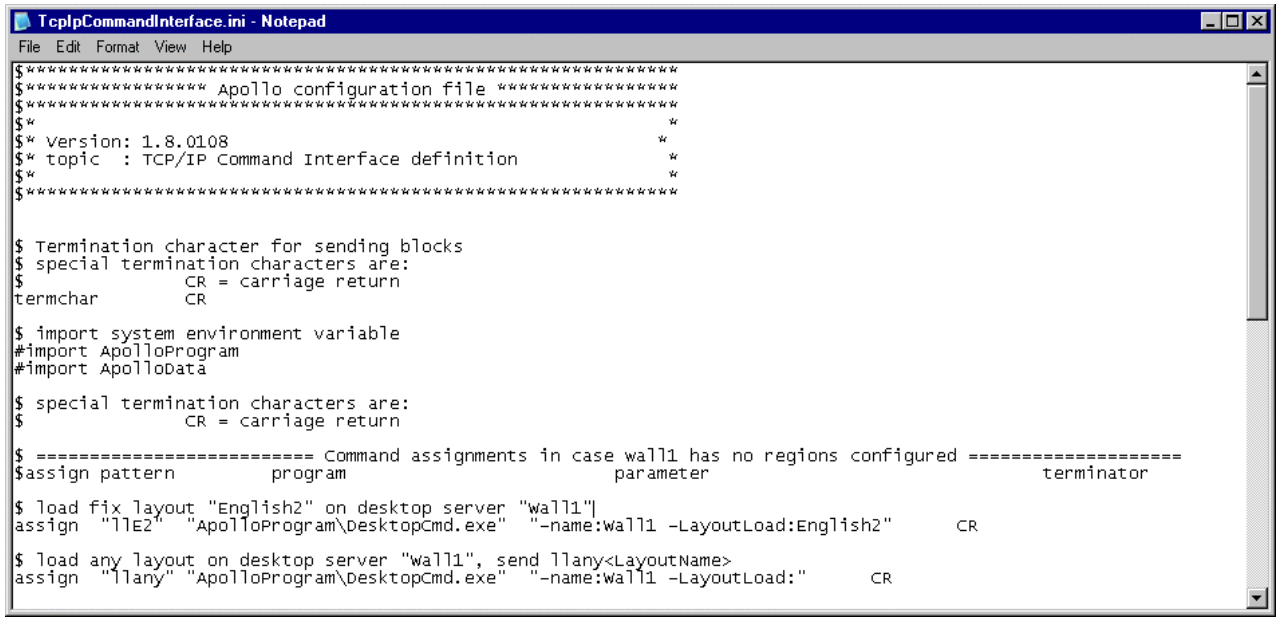
$assign pattern program parameter terminator

assign "LoadFree" "ApolloProgram\DesktopCmd.exe" "-name:" CR

string sent:

„LoadFree Wall1 –region:Left –LoadLayout:English1<CR>“

The program launches the application "ApolloProgram\DesktopCmd.exe" with the parameters „-name:Wall1 –region:Left –LoadLayout:English1“

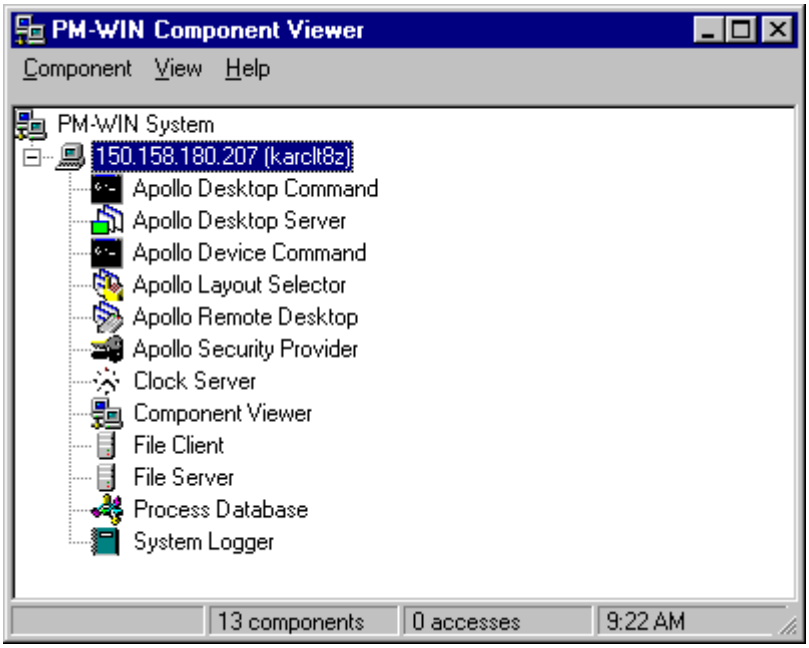

TcpIpCommandInterface.ini - Notepad
File Edit Format View Help
$***
$****************** Apollo configuration file ********************
$***
$*   *
$* Version: 1.8.0108   *
$* topic : TCP/IP Command Interface definition   *
$*   *
$***
$ Termination character for sending blocks
$ special termination characters are:
$ CR = carriage return
termchar   CR
$ import system environment variable
#import ApolloProgram
#import ApolloData
$ special termination characters are:
$ CR = carriage return
$ ========================== Command assignments in case wall1 has no regions configured ====================
$assign pattern   program   parameter   terminator
$ load fix layout "English2" on desktop server "Wall1"
assign "llE2" "ApolloProgram\DesktopCmd.exe" "-name:Wall1 -LayoutLoad:English2"   CR
$ load any layout on desktop server "Wall1", send llany<LayoutName>
assign "llany" "ApolloProgram\DesktopCmd.exe" "-name:Wall1 -LayoutLoad:"   CR

12.4 Application management

Application Management is a utility used to monitor all locally running Apollo applications.

Use the command **Component Viewer** from the context menu of the **Control Room Bus** in the taskbar to open a dialog displaying the currently running Apollo components using a tree-like structure.

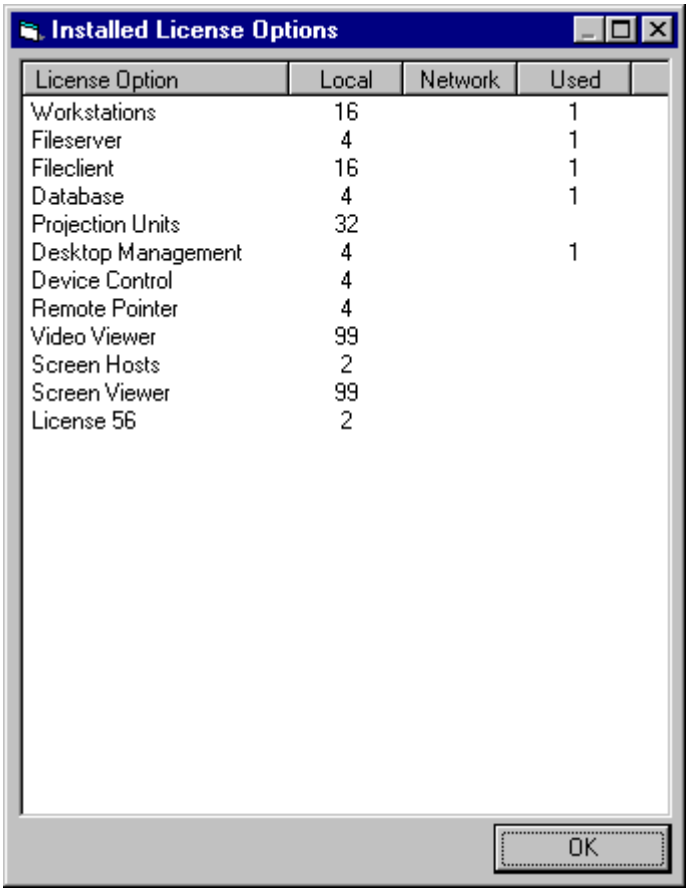
Application Management closes all still running Apollo applications once the **Control Room Bus** is finished



12.5 License management

Use the command **Component Viewer** from the context menu of the **Control Room Bus** in the taskbar to open a dialog with the menu entries **Component**, **View**, **Help**.

Select **View|Licenses** to check all available Apollo licenses. The following dialog opens:



This service is only for information about the licenses, not for modifying the licenses.

There is no license for the Web Viewer. The Web Viewer is for free!

In order to get a new license (e.g. the demo license has expired or the Apollo project has been changed), please send the MAC Address of the network card of the **Desktop Server** as well as the complete Visio plan of the Apollo configuration to mailto:bps.bcd.apollo.support@barco.com. You then will receive a new Apollo license file which is to copy into the folder of the Apollo project.

Determine the correct MAC Address by launching the command prompt and entering

ipconfig /all

The MAC Address of the network card is listed as value of **Physical Address.**

The MAC Address of the network card is used to generate the license file. Therefore when replacing a network card, a new license has to be ordered!

12.6 Time synchronization

All computers within one network have to have the same time. Use the **Control Room Configurator** to specify which computer is to be the clock server for all other Apollo network computers. Just set the **Clock Server** property in the **Custom Properties** of the **master** in the Apollo database to **True**.

Now all Apollo network computers can be synchronized and set to the same time

12.7 Log file

All status and error messages are written to a file in order to check the system. This log-file is located in the folder **..\ApolloProject\LOG**.

The general syntax is as follows:

<class> <node> <task> <stamp> <module> <function>:<text>

class	One character m (message) v (verbose) r (error)
node	Name of the computer or his IP address
task	Name of application
stamp	time (dd.mm.yy hh.mm.ss.mmm)
module	Name of the module
function:	Name of the function
text	message

The general file name of the log file is <yyyy><mm><dd>.<no>. It includes the current date and a number between 000 and 999.

The log-files of all computers of the Apollo network are merged in the log-file on the **master** (control computer of the Display Wall).

The file size is limited to 20MB. When this size is exceeded, entries are deleted according the sequence of generation, first the oldest ones.

12.8 Security Provider

The Apollo security mechanism is based on **AccessGroups** and **restricted objects**. Apollo allows configuring an individual permission for every **AccessGroup** of every object.

The **AccessGroups** are configured with an ASCII editor. The **restricted objects** are configured dynamically via the **Permission** command available in the Remote Desktop and in the Layout Selector.

Apollo assigns permissions to **AccessGroups** and not to individual users. A user is identified by his Windows login name.

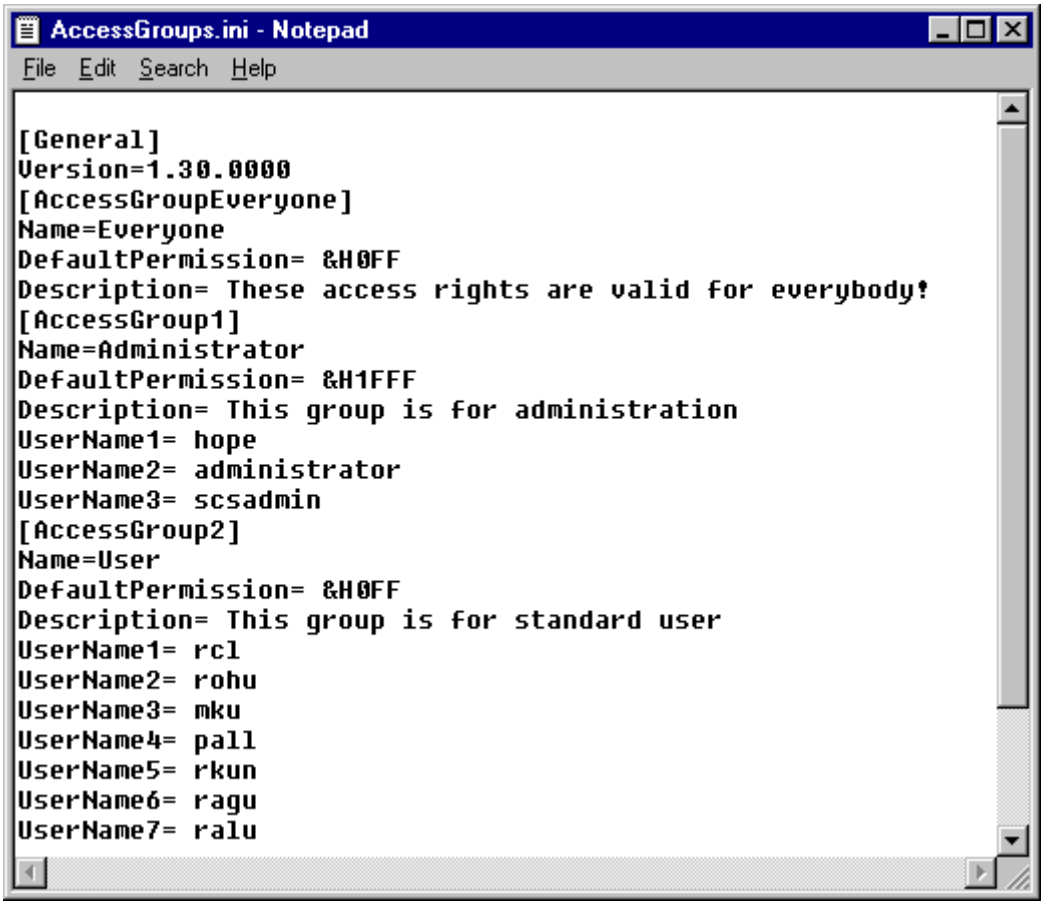
A user can be assigned to multiple AccessGroups. In case the respective AccessGroups have different permissions on an object, the user assigned to multiple AccessGroups has the most significant permission given to one of these AccessGroups.

Without any specific assignment, as default every user is assigned to the **AccessGroup** Everyone.

12.8.1 Defining accessGroups

The AccessGroups and the assigned members are configured in the file **AccessGroups.ini**. This file is located in the subfolder **ServerData** in the **ApolloProject** folder.

The subfolder ServerData and a sample AccessGroups.ini file is created by quitting the Settings Dialog with OK. Then the AccessGroups.ini file can be edited and customized. The modifications will be valid after an additional launching of Apollo Settings.



To add a new user to an **AccessGroup**, proceed as follows:

Add an additional line at the end of the specific **AccessGroup**

Assign the new user by means of his network name to a new **UserName** (the UserName have to be counted in ascending order, e.g. for AccessGroup2 a new user is assigned to UserName8)

To add a new **AccessGroup**, proceed as follows:

add the desired **AccessGroup** (e.g. [AccessGroup3]) at the bottom of the AccessGroups.ini file

enter a name for this **AccessGroup**, the **DefaultPermission** (cf. DefaultPermission), and a **Description**

assign the first member of this new AccessGroup to UserName1.

When defining a new AccessGroup or adding a new user to an existing one, mind the correct syntax as given in the existing AccessGroups / user assignment.

To activate the modifications made in the **AccessGroup.ini** file:

Select **Start|Programs|Barco Apollo|Settings**. Make sure that the checkbox **Activate Apollo** is checked and click **OK**. Apollo will be terminated and restarted with the updated **AccessGroups**.

12.8.1.1 DefaultPermission

DefaultPermission is coded as 16 bit hexadecimal. The following table gives an overview about the bits. Please see the respective item to get information about the assignment.

n.a.	n.a.	n.a.	s7	s6	s5	s4	s3	s2	s1	save	perm	wr_ad	wr	rd	restricted

Bit	Meaning	Description (example: layout)
Restricted	Restricted	Has to be set, otherwise the security provider neglects the respective object
Rd	Read	Layout is visible
Wr	Write	Layout can be loaded
Wr_ad	Write advanced	Windows of a layout can be moved
Perm	permission	Edit permission is available
Save	Save	Layouts can be saved
S1 to S7	Special 1 ... Special 7	-
n.a.	Not assigned	-

To get information about the meaning of a specific bit with respect to a different object than a layout, please refer to Permissions

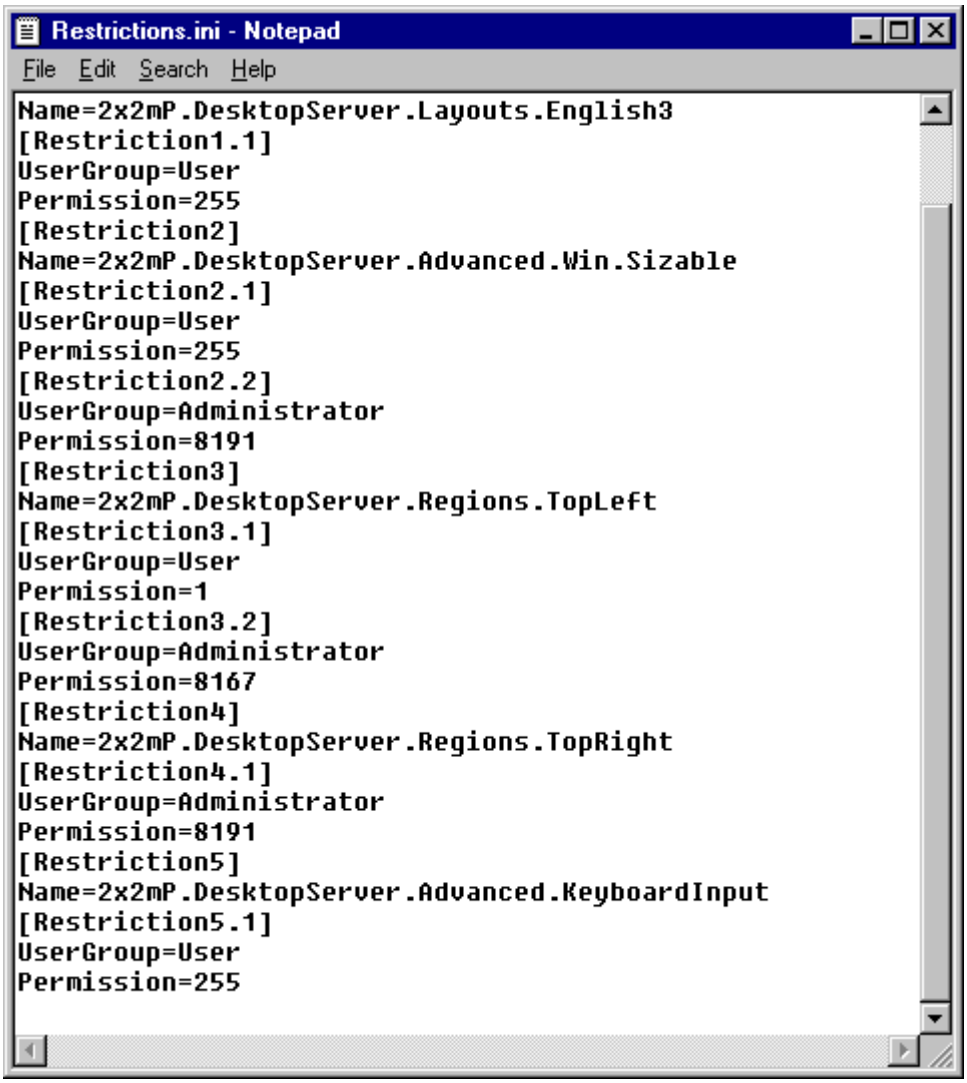
12.8.2 Configuration of restricted objects

Regions, layouts and shortcuts can be restricted in order to give the different user groups limited access to these objects. The dialog for changing the permissions at run-time can be launched from **Remote Desktop**. and **Layout Selector** Use this dialog to modify or remove access rights.

By means of this dialog, the permissions can only be reduced. To enhance permission, edit the AccessGroups.ini-file, please!

Use the file **Restrictions.ini** in the subfolder **ServerData** in the **ApolloProject** folder to view how the default permissions as defined in the file **AccessGroups.ini** have been adjusted by means of the **Permission edit** dialog.

Modifications by means of the **Permission edit** dialog apply for the entire **AccessGroup**.



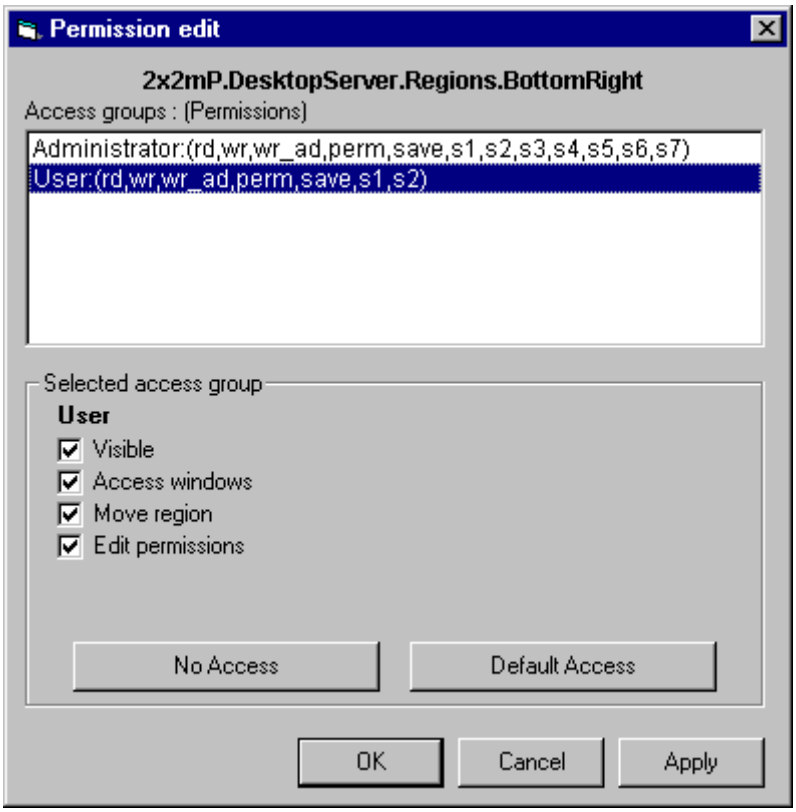
12.8.3 Permissions

The **Permission edit** dialog pops up where the permissions for the defined access user groups can be viewed and defined.

Select the desired access user group and check the respective permission to give allowance or uncheck the feature to deny access to it.

Click on **No Access** to remove all permissions for the selected access user group.

Click on **Default Access** to restore the default permissions as set in the security provider.



Restrictions are specific for the respective object. The following overview shows what a user is allowed to do if he is given the specific permission.

12.8.3.1 Restrictions for regions

A region object has got the following permissions:

Visible	**Remote Desktop** and **Layout Selector**: the tab for this region is visible required to show the layout buttons for this region **Remote Desktop** only: the region and the region's windows visible
Access windows	**Remote Desktop** and **Layout Selector**: required to have enabled layout buttons **Remote Desktop** only: the windows of this region can be moved and sized
Move region	**Remote Desktop** only: the region can be moved and sized
Edit permissions	The user is allowed to open the **Permission edit** dialog

12.8.3.2 Restrictions for layouts

A layout object has got the following permissions:

Read	**Remote Desktop** and **Layout Selector**: the layout button is visible
Load/Unload	**Remote Desktop** and **Layout Selector**: the layout button is enabled so that it can be clicked to load/unload the layout
Edit permissions	The user is allowed to open the **Permission edit** dialog
Save	The user is allowed to overwrite the layout in the database when he wants to configure a layout online

12.8.3.3 Restrictions for shortcuts

A shortcuts object has got the following permissions (Remote Desktop only):

Visible	The shortcut is visible in the combo box in the **Commandline** dialog
Execute	The shortcut can be executed. (The **Execute** button in the **Commandline** dialog is enabled when the shortcut is selected.)
Modify	The user is allowed to edit the shortcut before executing it
Edit permissions	The user is allowed to open the **Permission edit** dialog

12.8.3.4 Restrictions for advanced menus

In the **Remote Desktop** some menus can be enabled/disabled using the following permissions:

12.8.3.5 Window Properties|Description

Enabled	Enables the menu: **Window Properties | Description**
Edit permissions	The user is allowed to open the **Permission edit** dialog

12.8.3.6 Window Properties|Sizable

Enabled	Enables the menu: **Window Properties | Sizable**
Edit permissions	The user is allowed to open the **Permission edit** dialog

12.8.3.7 Window Properties|Always on Top

Enabled	Enables the menu: **Window Properties | Topmost**
Edit permissions	The user is allowed to open the **Permission edit** dialog

12.8.3.8 Window Properties|Visible

Enabled	Enables the menu: **Window Properties | Visible**
Edit permissions	The user is allowed to open the **Permission edit** dialog

12.8.3.9 Edit|Invisible Windows

Enabled	Enables the menu: **Edit | Invisible Windows**...
Edit permissions	The user is allowed to open the **Permission edit** dialog

12.8.3.10 Edit|Keyboardinput

Enabled	Enables the menu: **Edit | Keyboardinput**
Edit permissions	The user is allowed to open the **Permission edit** dialog

12.8.3.11 Edit|CommandLine

Enabled	Enables the menu: **Edit | Commandline**...
Edit permissions	The user is allowed to open the "**Permission edit**" dialog

12.8.3.12 Edit|Permissions

Enabled	Enables the menu **Permissions**
Edit permissions	The user is allowed to open the **Permission edit** dialog

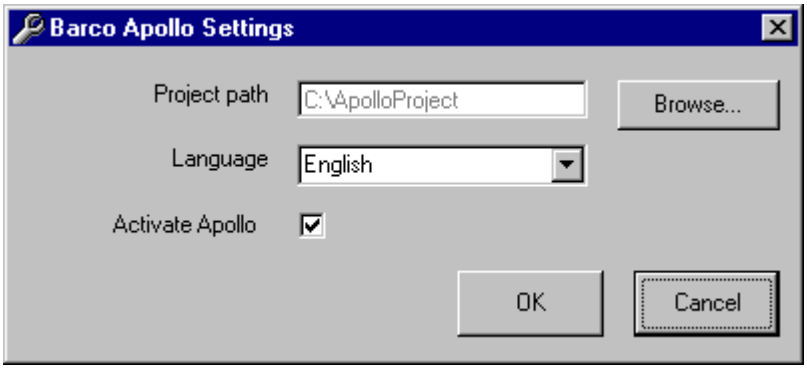
12.8.3.13 Edit|SaveLayout

Enabled	Enables the menu: **Edit | Layout | Save**...
Edit permissions	The user is allowed to open the **Permission edit** dialog

13 Customized configuration and uninstallation of Apollo

13.1 Settings

The system can be reconfigured to fit the needs of any project at any time after the initial installation using the shortcut **Start|Programs|Barco Apollo|Settings**. The following dialog opens:



13.1.1 Project directory

Enter a directory for your project. This directory will contain the license, project-specific ini files, the subdirectory **ApolloDatabase** and the subdirectory **Log**, among others. The database **ApolloLayouts.mdb** saved in this subdirectory contains the layout definitions.

This subdirectory has to be made accessible (shared) to all workstations operating the **Layout Editor.**

Select this directory using the Windows Explorer and open the **Properties** dialog. Then select the **Share** tab followed by selecting **Share as**. The share name should be **ApolloDatabase**.

The project directory is generated only if the **Settings** dialog is exited with OK!

13.1.2 Language

Select the language from the list field. Apollo is provided in English and in German. However, the user interface of Apollo can be converted to any 8-bit language using the respective language files; see Apollo Internationalization. These languages are then also available from the list field.

Close the **Settings** dialog with OK to accept the settings and close all Apollo applications and restart with the new settings.

13.2 Apollo Internationalization

User Apollo user interfaces can be translated. Just copy the folder **English** from the **C:\Program Files\Barco Apollo\Language** directory to the same directory and give the folder the name of the desired language.

Edit the *.lng files located in this folder and translate the second column.

Launch **Settings** using the shortcut **Start | Programs |Barco Apollo |Settings** and select the desired language, see Settings.

13.2.1 Asian languages

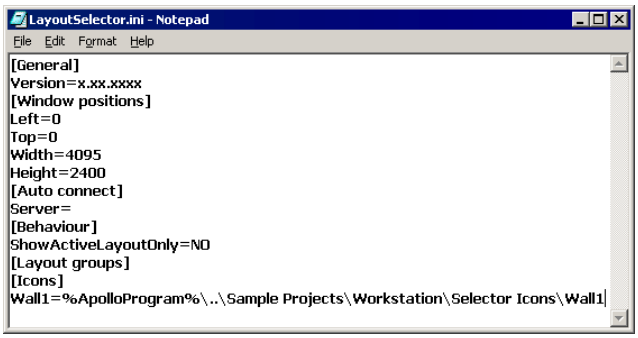
Starting with Apollo 1.4SR2, Asian languages are supported. Before you can use the Japanese localization, the system default locale has to be set to Japanese! (**Start|Settings|Control Panel|Regional Options)**

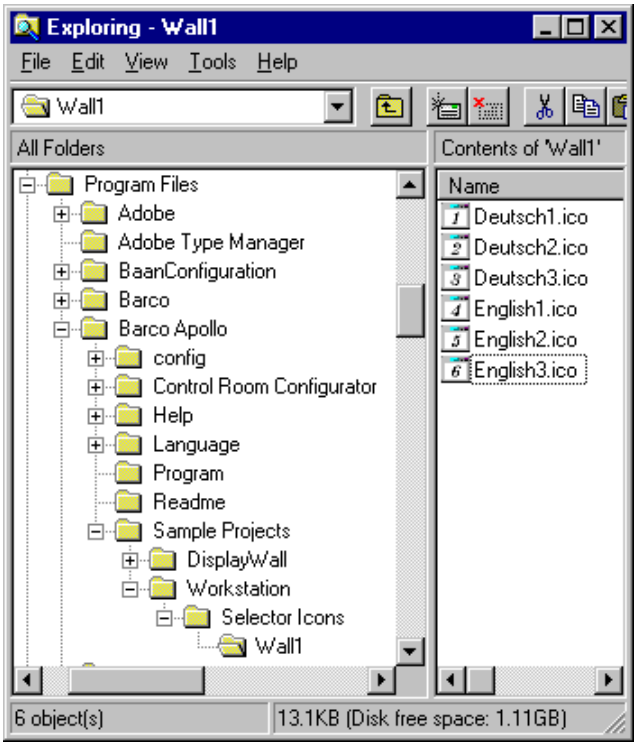
The following texts cannot be localized in Asian languages (2 byte) character fonts:

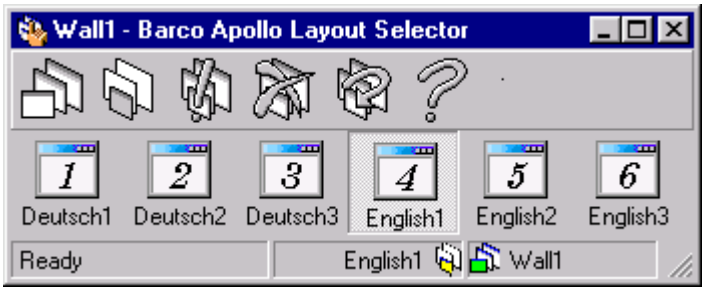
- All names in the **Control Room Configurator** (group names, device names, ..)
- All source names in **viewersources.ini**
- **LayoutEditor**; Layout names, instead you can use the 'short name'
- **LayoutEditor**; Shortcut names
- **LayoutEditor**; Region names

13.3 Layout icons

The icons of the layouts displayed in the **Layout Selector** can be customized. As default the standard icon is used. Edit the **ini-file** of the **Layout Selector** to customize the icons. In this **ini-file**, assign to the **Icons** attribute of the respective Display Wall the entire path of the folder where the icons for the layouts are located. In this folder, for every layout an individual icon can be defined as nameoflayout.ico.







13.4 Apollo font settings

Besides the general system font properties as set on the **Properties|Display Properties|Appearance** tab (right mouse click on the windows desktop), the appearance of Apollo can be adjusted independently from all other applications.

To adjust the Apollo appearance, proceed as follows:

- define environment variables:

  ApolloFontSize: for general texts and menu texts

  ApolloFontName: for general texts and menu texts

  ApolloLabelFontSize: for all labels and tool tip texts

  ApolloLabelFontName: for all labels and tool tip texts

To add or change the values of environment variables

- Open **System** in **Control Panel**.
- On the **Advanced** tab, click **Environment Variables**, then click the name of the user variable or system variable you want to change, as follows:
- Click **New** to add a new variable name and value.
- Click **Edit** to change a current variable name and value.
- Click **Delete** to remove a variable name and value.

If you are not logged on as administrator to the local computer, the only environment variables you can change are user variables.

To open a **Control Panel** item, click **Start**, point to **Settings**, click C**ontrol Panel**, and then double-click the appropriate icon.

The changes are saved in the registry so they are available automatically the next time you start your computer.

You may have to close and reopen running programs for the new settings to take effect.

Or

- use the command line parameter

  /FontName: /FontSize for general texts and menu texts

  /LabelFontName: /LabelFontSize for all labels and tool tip texts

13.5 Apollo uninstall

Use the following shortcut to uninstall Apollo: **Start | Settings | Control Panel | Add/Remove Programs.** Select **Barco Apollo** and click on the **Change/Remove** button. Follow the onscreen instructions.

The InstallShieldwizard pops up indicating **Preparing Setup**. Subsequently you are asked if you really want to completely remove the selected application. Confirm this dialog with **OK**. Uninstall then continues.

In the now opening dialog, indicate whether the registry entries are deleted during uninstall (select **Remove Settings**) or if they are to remain on the computer (do not select **Remove Settings**). Retaining the content of the registry entries is recommended when the Apollo uninstall is followed by a new Apollo install.

Uninstall then continues.

Everything that was installed by default is removed during the uninstall process.

Folder and files with project-specific modifications (e.g., **C:\Program Files\Barco Apollo\Language**) remain intact just as the project directory.

14 Soap API Service

14.1 Requirements

The Apollo SOAP API Service is only supported by Windows 2000 and Windows XP, not by Windows NT.

For the client side setup please refer to doc-3338-2: Reference Manual Apollo !.5 Soap Interface

To install this service, the following configuration is mandatory

- Windows 2000 Service Pack 3
- Internet Explorer 5.5 SP2 or later
- Windows Scripting Host 5 or later
- Internet Information Service (IIS)
- Soap SDK 3.0

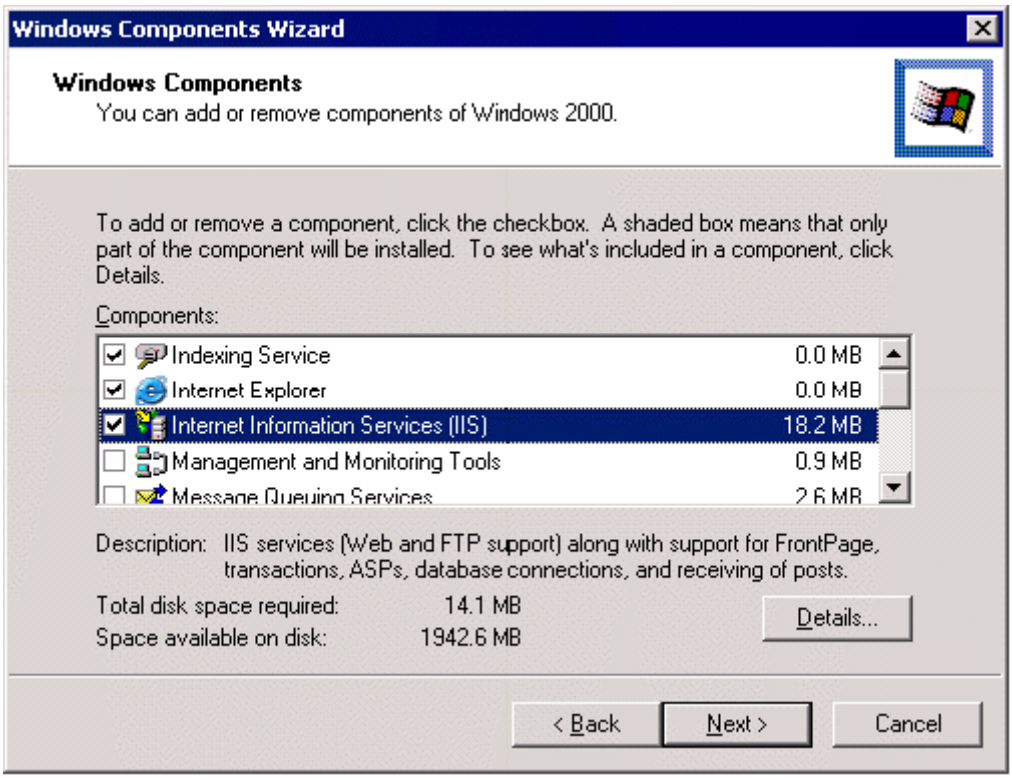
The installation and configuration of the **SOAP API** requires the following steps:

- Installation of the Internet Information Service IIS
- Installation of the SOAP SDK 3.0
- Creation and configuration of virtual directories
- Configuration of the DCOM

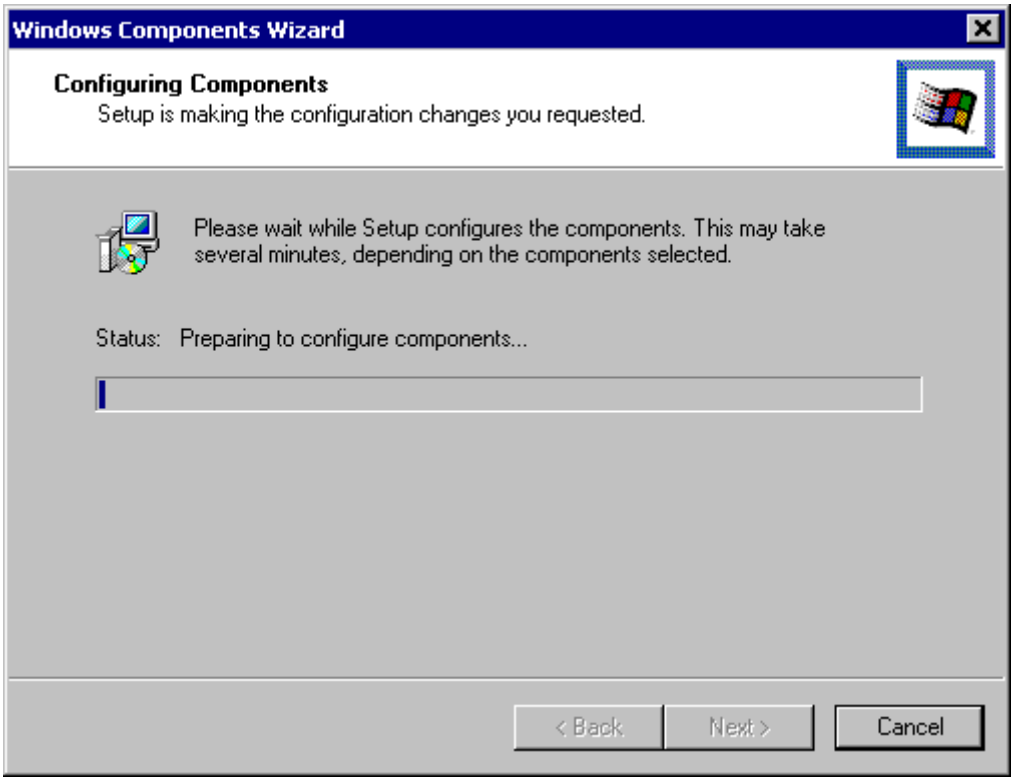
14.2 Installation of the Internet Information Service IIS

The Internet Information Service IIS is provided on the Windows2000 Professional CD-ROM.
To install the IIS, proceed as follows:
Insert the Windows2000 Professional CD-ROM into the CD-ROM drive.
If Autorun is enabled, the following dialog pops up offering various options. Select Install Add-On Components:

From the list of available components, select **Internet Information Service**:


Windows Components Wizard
Windows Components
You can add or remove components of Windows 2000.
To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Components:
Indexing Service 0.0 MB
Internet Explorer 0.0 MB
Internet Information Services (IIS) 18.2 MB
Management and Monitoring Tools 0.9 MB
Message Queuing Services 2.6 MB
Description: IIS services (Web and FTP support) along with support for FrontPage, transactions, ASPs, database connections, and receiving of posts.
Total disk space required: 14.1 MB
Space available on disk: 1942.6 MB
Details...
< Back
Next >
Cancel

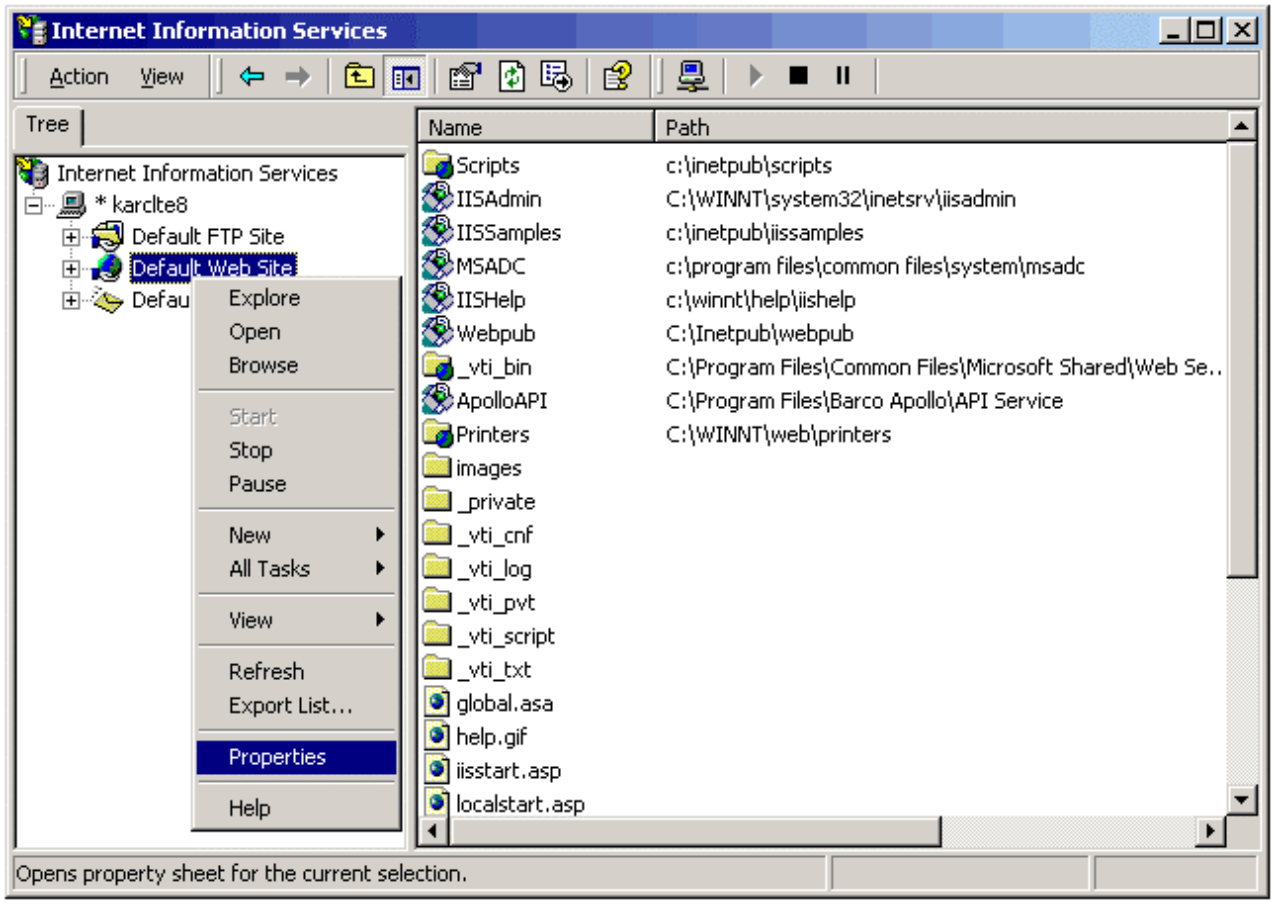
Setup then continues.


Windows Components Wizard
Configuring Components
Setup is making the configuration changes you requested.
Please wait while Setup configures the components. This may take several minutes, depending on the components selected.
Status: Preparing to configure components...
< Back
Next >
Cancel

The Internet Information Service is installed on your system.

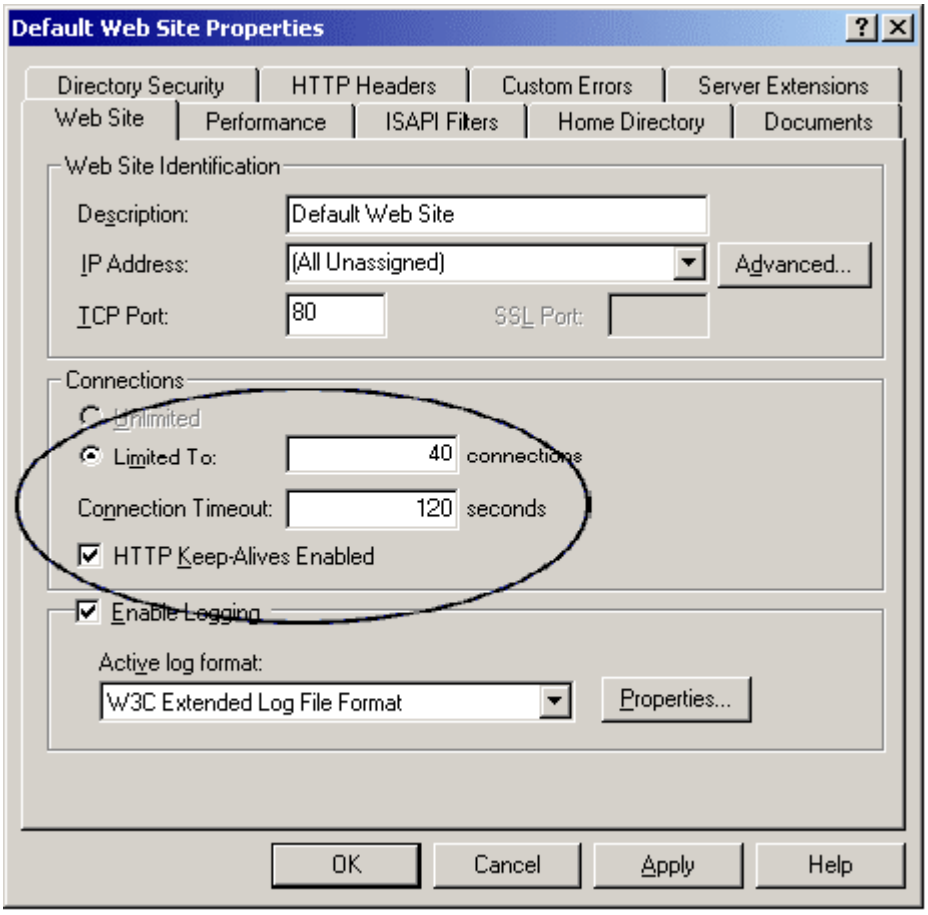
To configure the Internet Information Service, select
Start|Control Panel|Administrative Tools|Internet Services Manager.

Right click on **Default Web Site**, and select **Properties** from the context menu.



A dialog opens with 8 tabs.

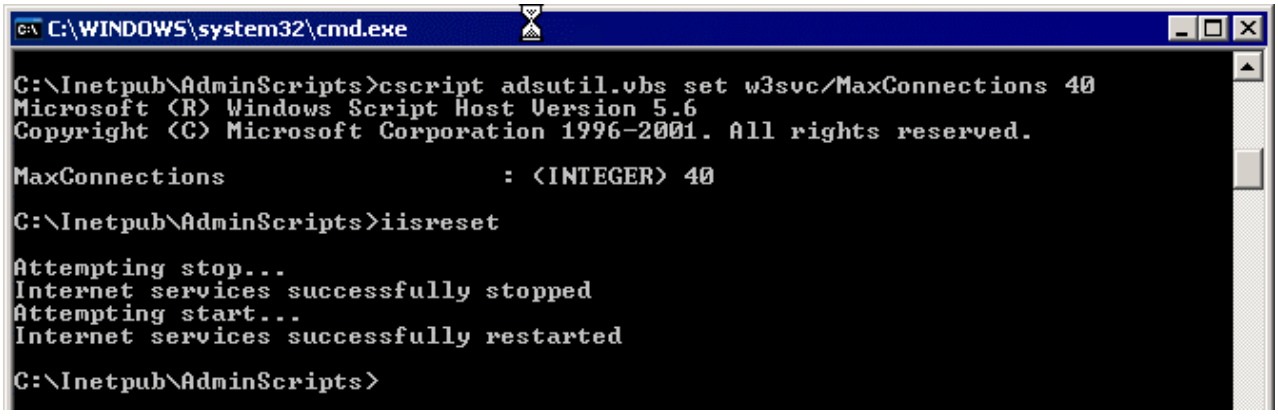
- Activate the tab **Web Site**.
- Check **HTTP Keep Alives Enabled**.
- Reduce Connection Timeout to **120** seconds.



The Internet Information Service on Windows workstations comes configured for a maximum of 10 HTTP connections. This can be bumped up to 40 connections (the hard coded limit).

To increase the number of connections,

- select **Start|Run|cmd**
- Change the directory to **...\Inetpub\adminscripts.**
- Enter the following command
  Cscript adsutil.vbs set w3svc/MaxConnections 40
- Press the carriage return key.
- Subsequently restart the IIS by entering the command **iisreset**

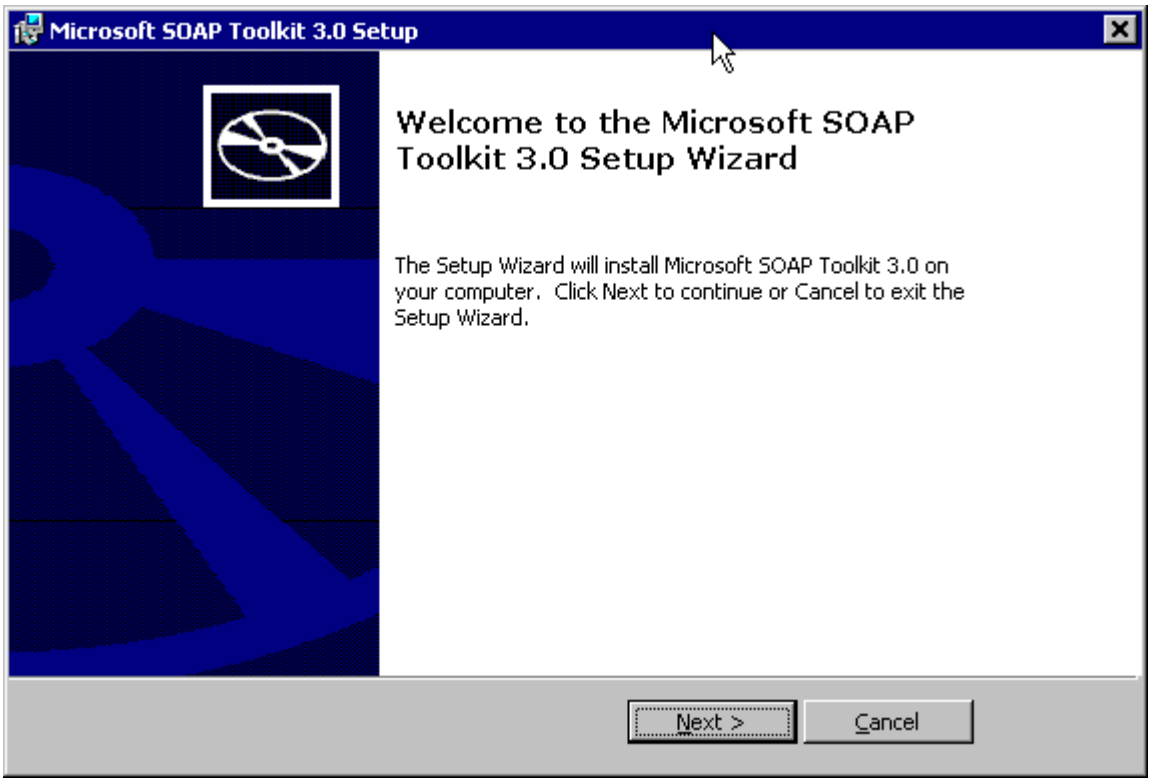


14.3 Installation of the SOAP SDK

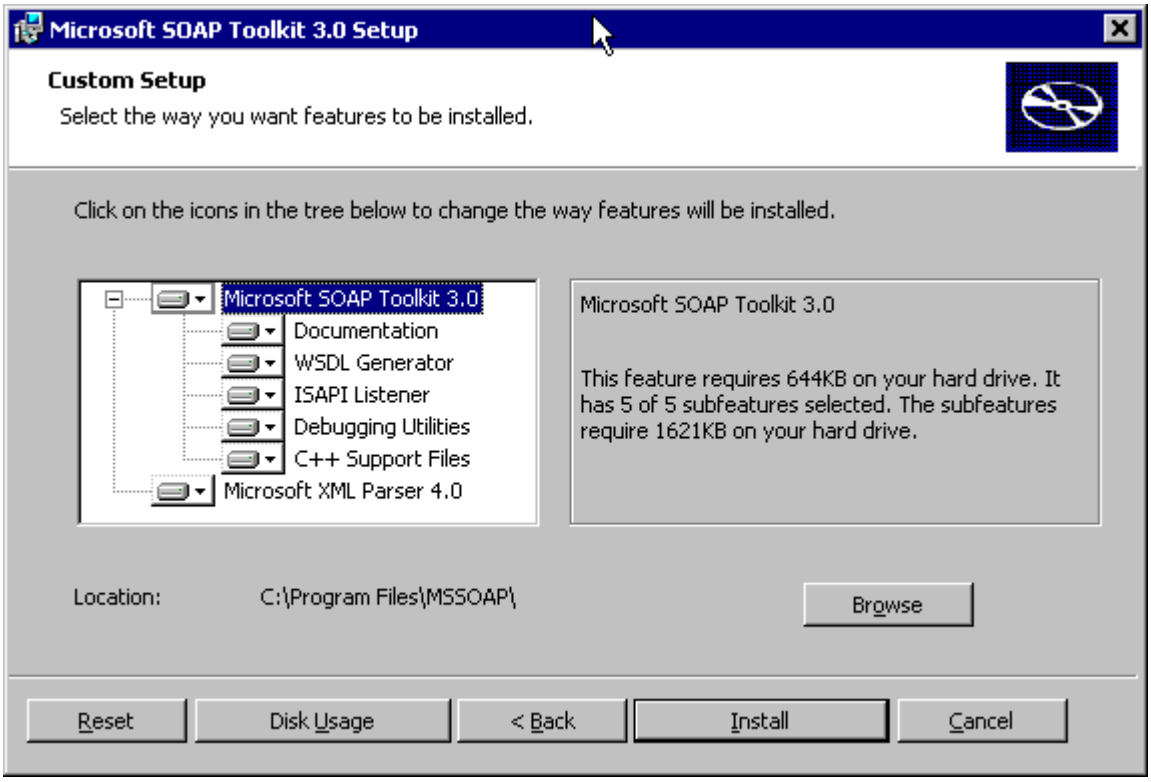
The SOAP SDK from Microsoft is provided on the Apollo CD-ROM and located in the folder

...\3rd Party\Microsoft SOAP Toolkit 3.0\soapsdk.exe

Double click on the **soapsdk.exe** to install it. The following dialog pops up:


Microsoft SOAP Toolkit 3.0 Setup
Welcome to the Microsoft SOAP Toolkit 3.0 Setup Wizard
The Setup Wizard will install Microsoft SOAP Toolkit 3.0 on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
Next >
Cancel

Select the Microsoft SOAP Toolkit 3.0:


Microsoft SOAP Toolkit 3.0 Setup
Custom Setup
Select the way you want features to be installed.
Click on the icons in the tree below to change the way features will be installed.
Microsoft SOAP Toolkit 3.0
Documentation
WSDL Generator
ISAPI Listener
Debugging Utilities
C++ Support Files
Microsoft XML Parser 4.0
Microsoft SOAP Toolkit 3.0
This feature requires 644KB on your hard drive. It has 5 of 5 subfeatures selected. The subfeatures require 1621KB on your hard drive.
Location:
C:\Program Files\MSSOAP\
Browse
Reset
Disk Usage
< Back
Install
Cancel

Setup then continues, and the SOAP SDK is installed on your system.

14.4 Creation and configuration of virtual directory in the Internet Information Service

A virtual directory has to be created on the Apollo API server for the **.Net** clients and for the **Java** clients.

To create it, proceed as follows:

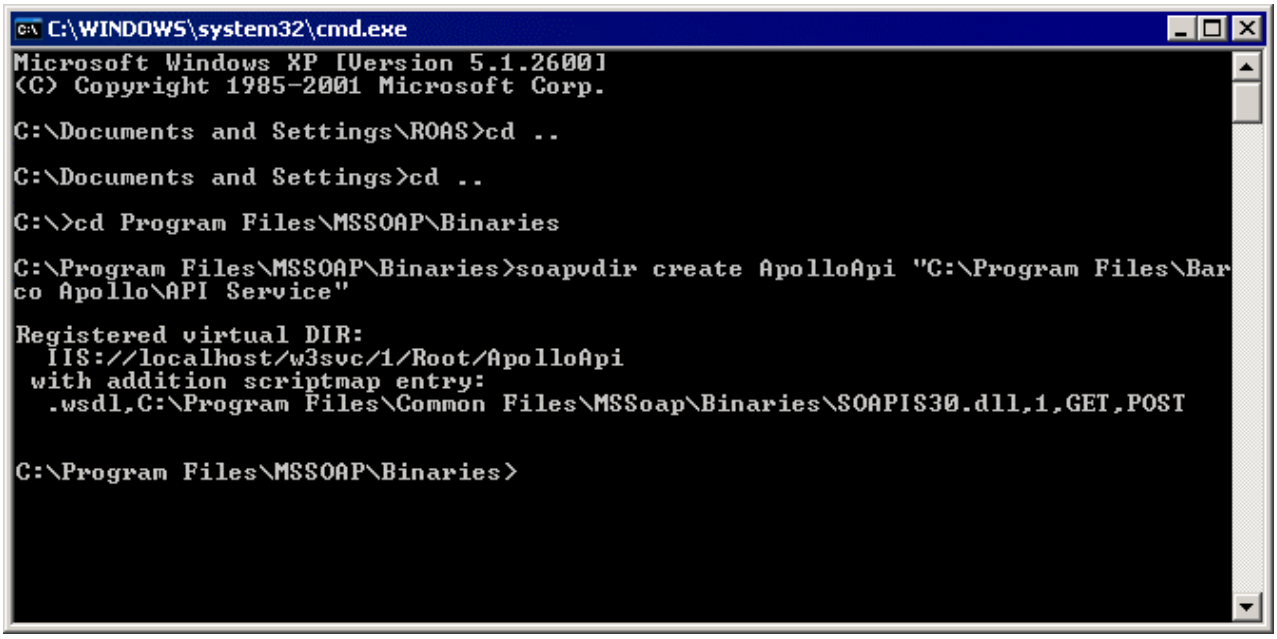
Open the command prompt.

Change the directory to **..\MSSOAP\Binaries** (if installation was made with the default settings, the entire path is **C:\Program Files\MSSOAP\Binaries** .

Type in the following command:

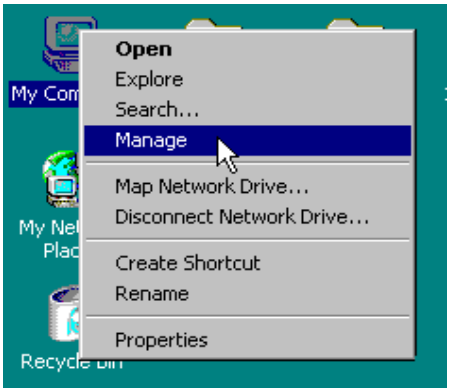
- **soapvdir Create ApolloApi "C:\Program Files\Barco Apollo\API Service"**
- Press the **Enter** key

This will make a virtual directory s with name **ApolloApi** in the IIS.

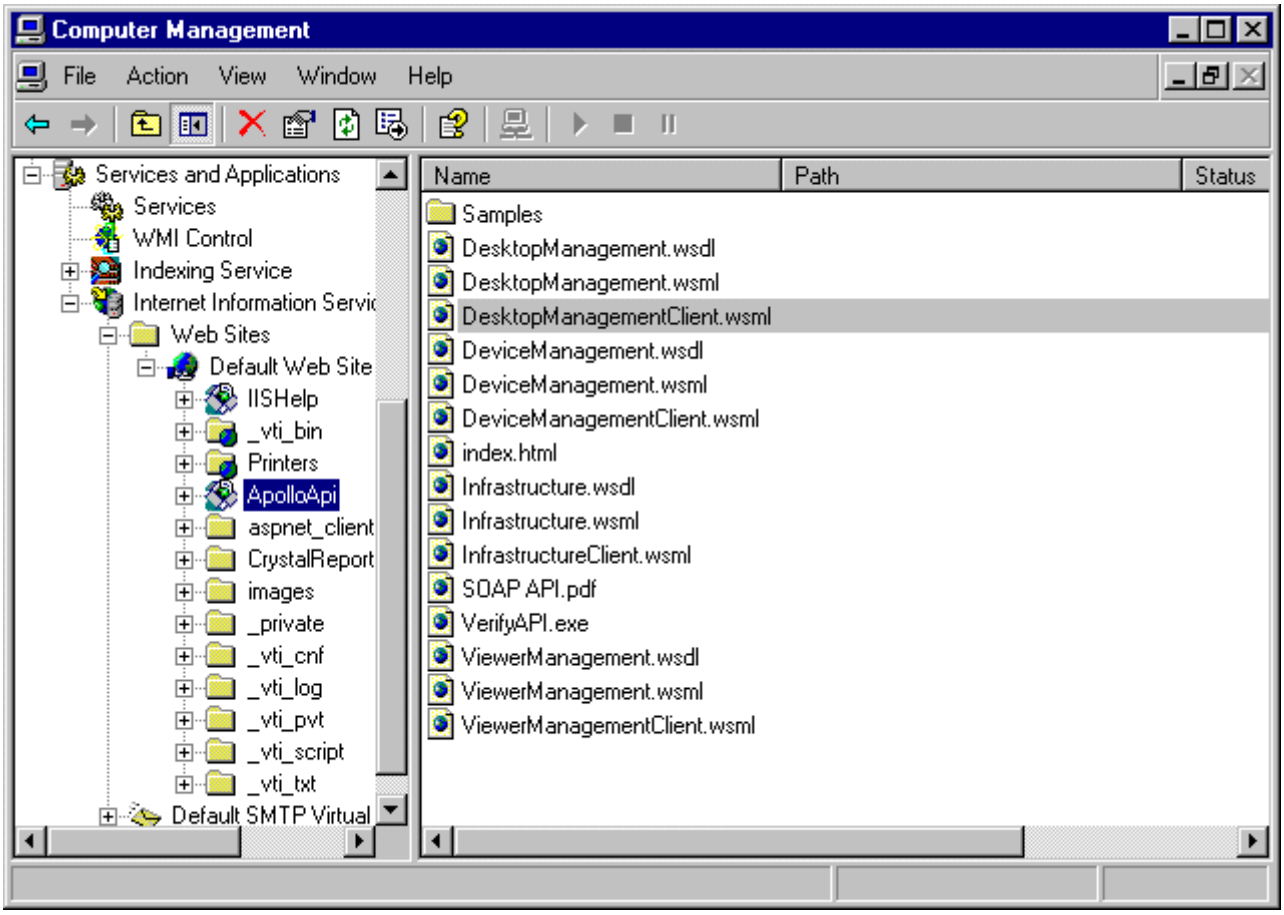


Now the virtual directory has to be configured.

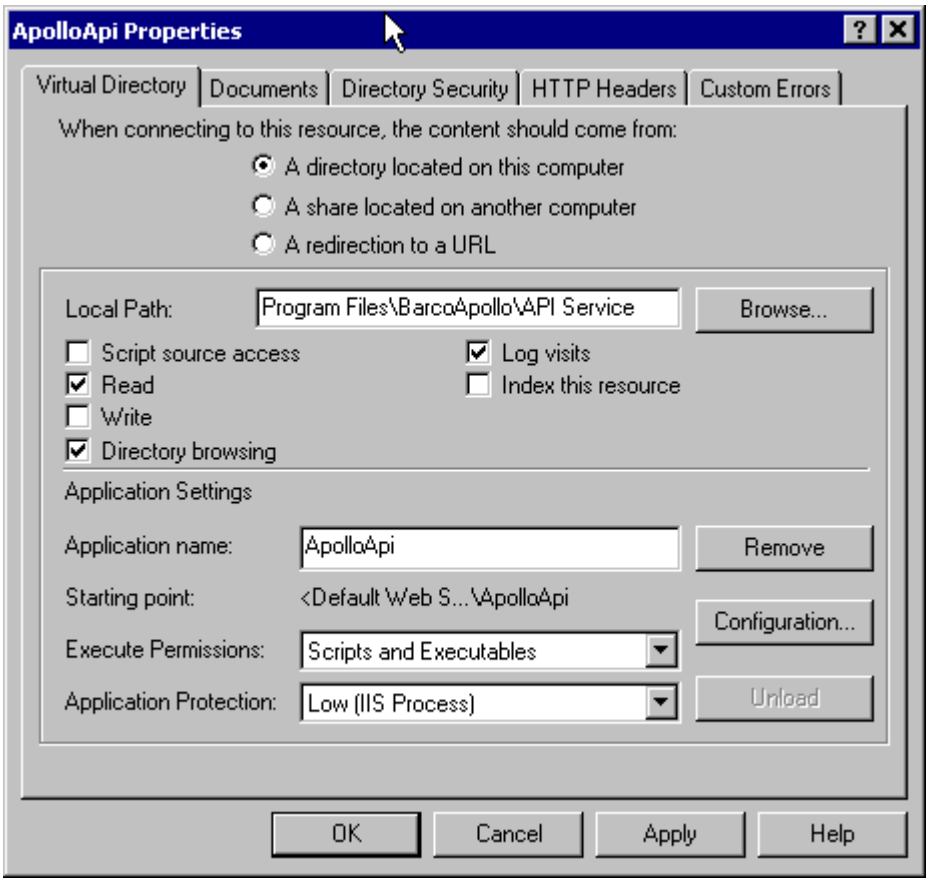
On the local desktop, click on **My Computer.** Select **Manage** from the context menu (right mouse click):



The **Computer Management** dialog opens. Browse to the **Internet Information Service**. Right click on **Apollo API.**



From the context menu, select **Properties.** On the tab **Virtual directory** check **Read** and **Directory browsing**:



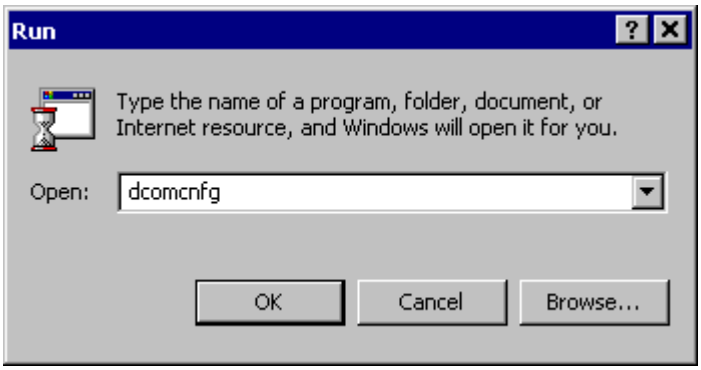
14.5 Configuration of the DCOM

To configure the DCOM, log in with administrative rights!

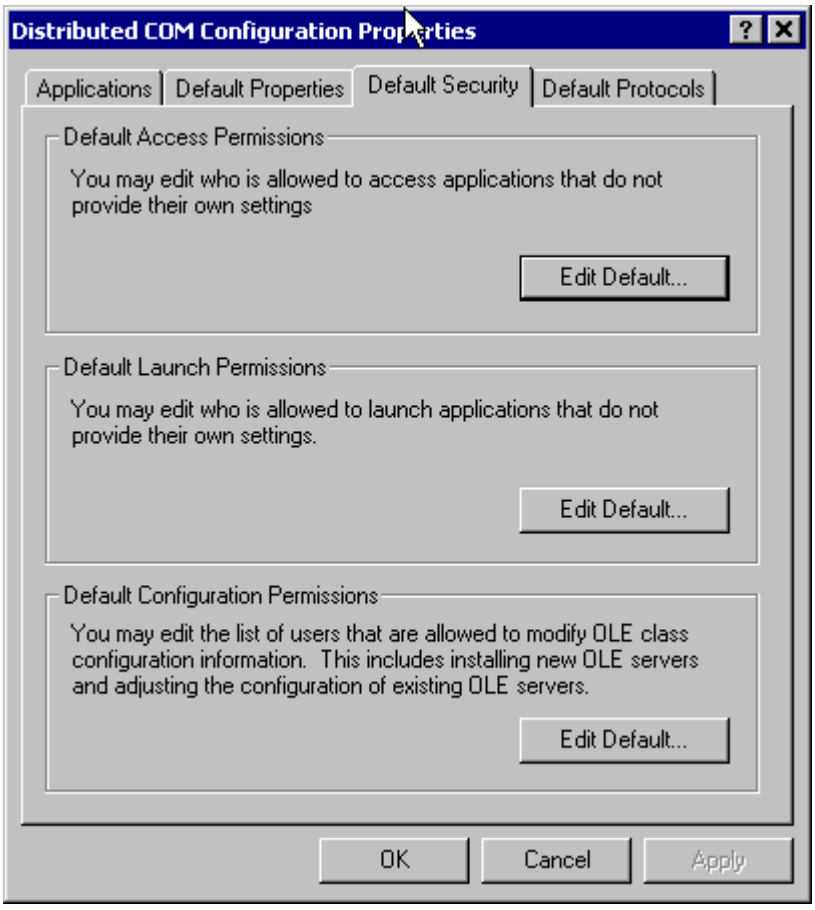
It is mandatory to proceed as described in this chapter!

14.5.1 Windows 2000

Select **Start | Run**. In the dialog box, enter **dcomcnfg**:

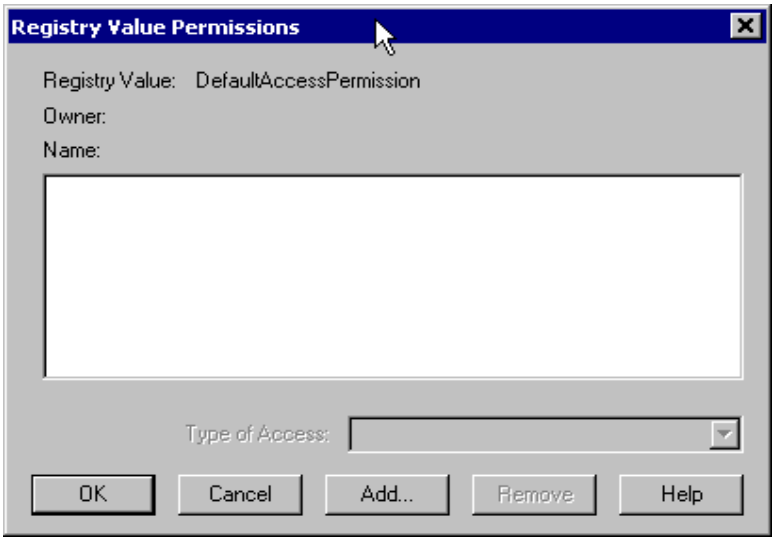


A multipage pops up. Select the tab **Default Security.**


Distributed COM Configuration Properties
Applications
Default Properties
Default Security
Default Protocols
Default Access Permissions
You may edit who is allowed to access applications that do not provide their own settings
Edit Default...
Default Launch Permissions
You may edit who is allowed to launch applications that do not provide their own settings.
Edit Default...
Default Configuration Permissions
You may edit the list of users that are allowed to modify OLE class configuration information. This includes installing new OLE servers and adjusting the configuration of existing OLE servers.
Edit Default...
OK
Cancel
Apply

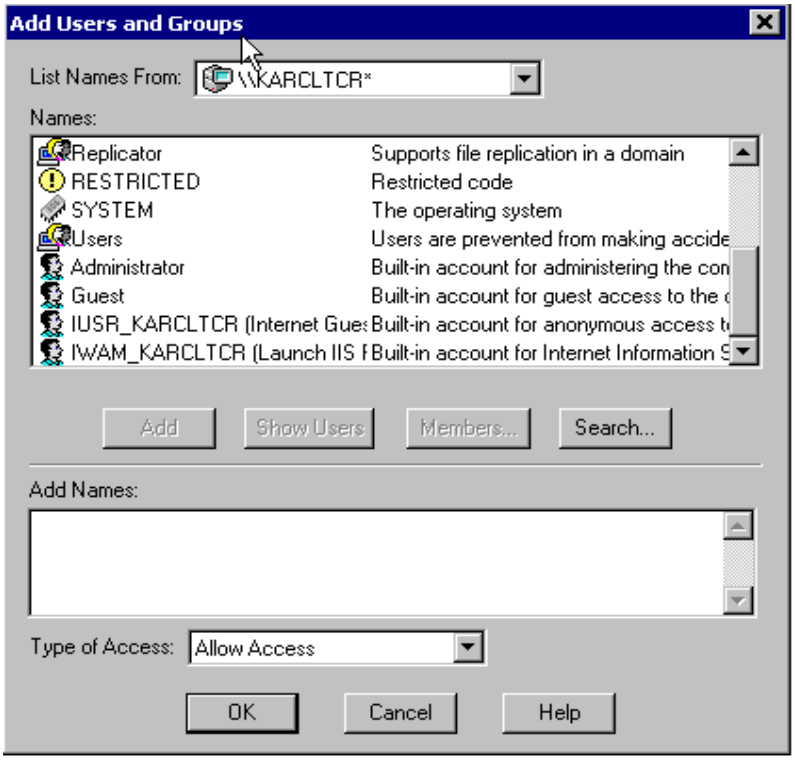
Now the access permissions have to be edited. Access has to be given to the local user **Interactive**, **System**, **Administrators**, **IUSR**, and **IWAM**.

When clicking on Edit Default, in Windows2000 the Registry Value Permissions opens with an empty list. All users have to be added.



Click on the **Add** button to add the required members.

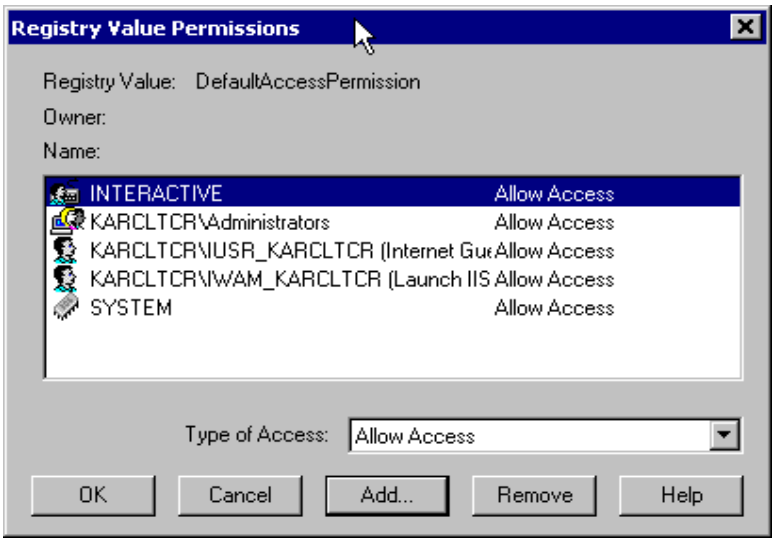
Make sure that in the "List Names From" box the local PC is selected!



Select the following users and add them:

- IUSR
- IWAM
- System
- Interactive
- Administrator

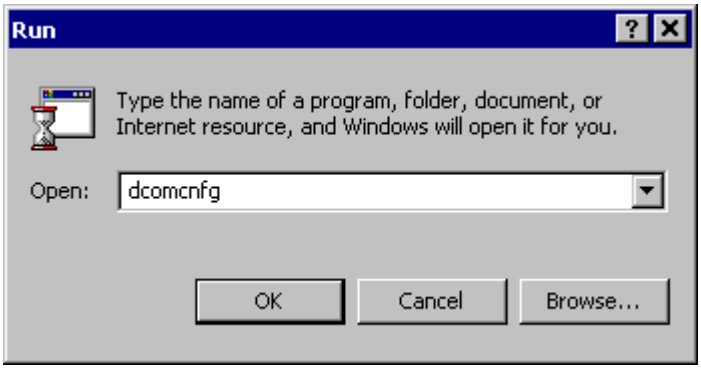
Accept the dialog with **OK**. Check if the required members are added in the **Registry Value Permissions**.



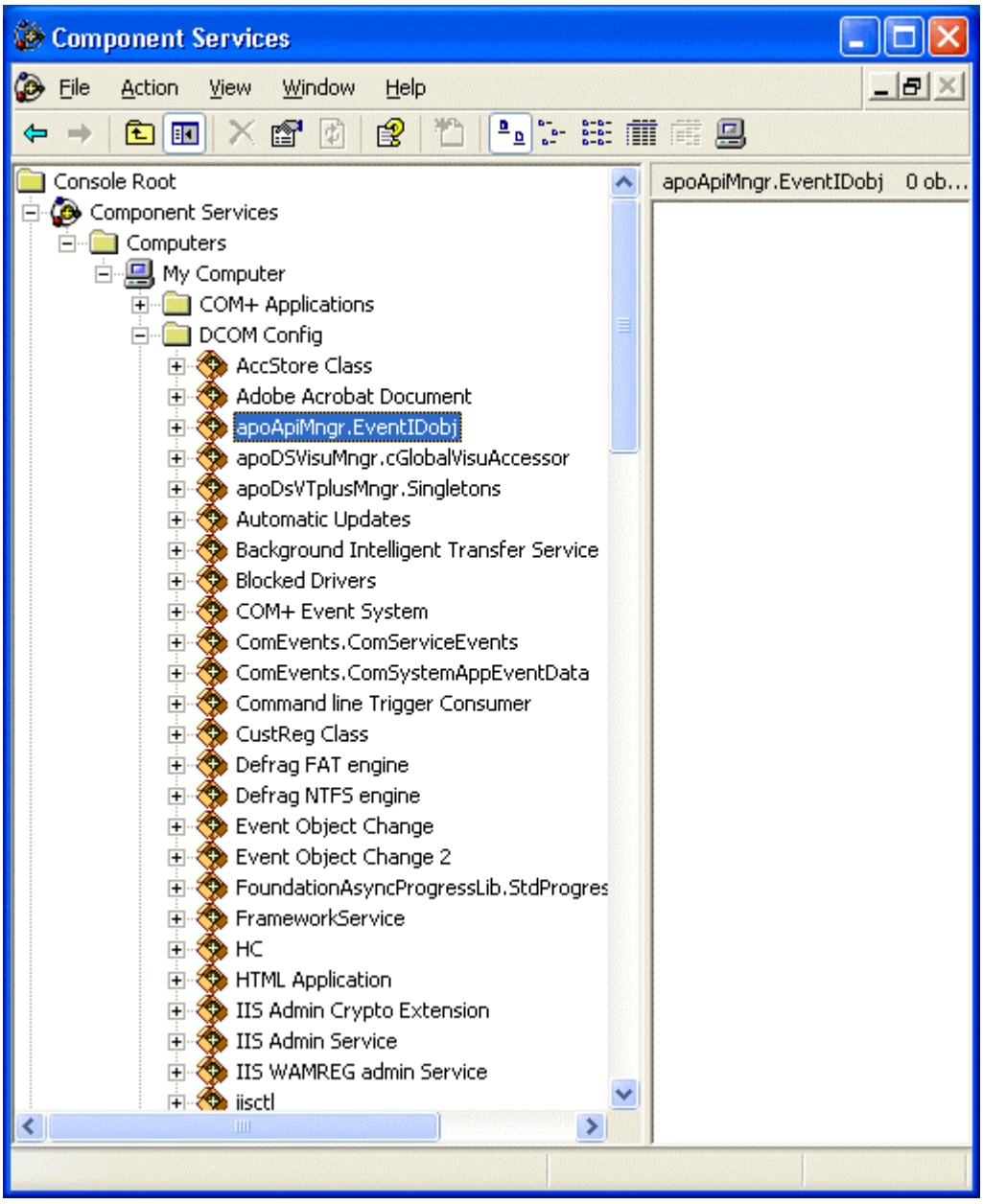
Subsequently **reboot** the system!

14.5.2 Windows XP

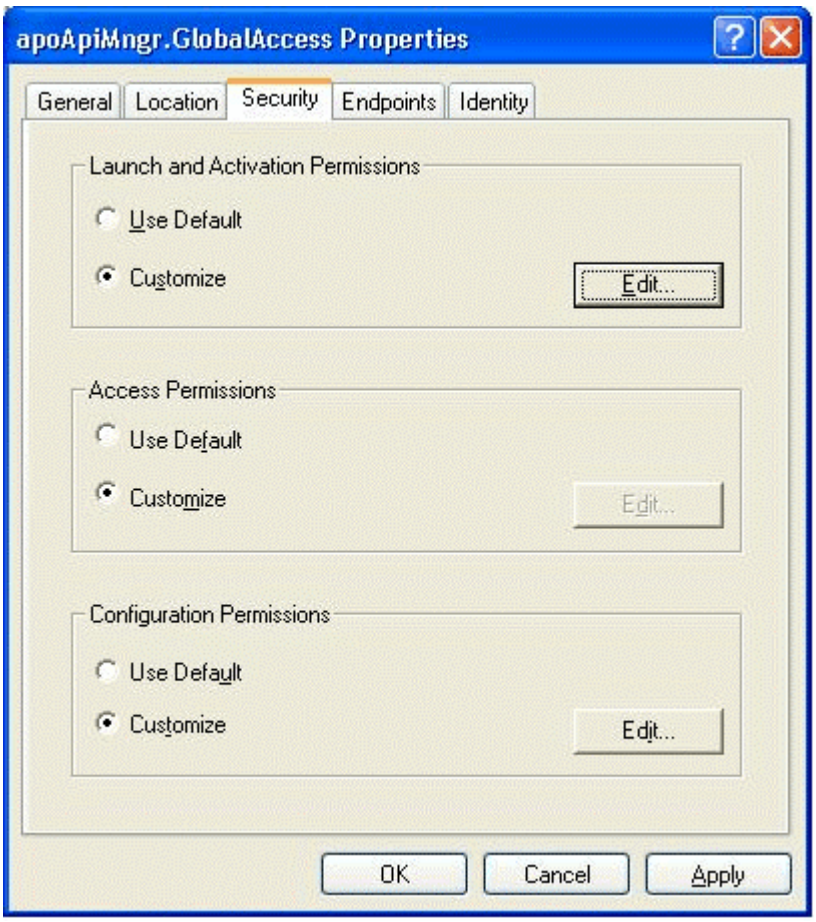
Select **Start | Run**, and enter the command **dcomcnfg**:



A dialog opens. In the treeview, navigate to **apoApiMngr.*** (the extension may vary from system to system)



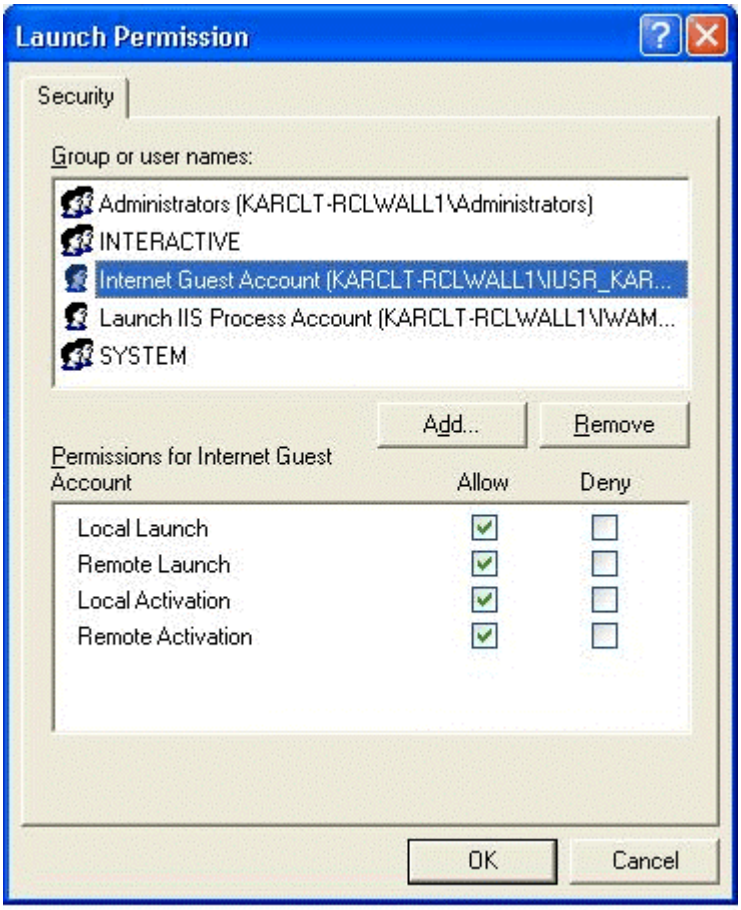
Right click on this entry to open the context menu. Select **Properties** and then activate the tab **Security**.



For the local users **IUSR** and **IWAM** the following rights have to be set: **Launch and Activation Permissions**, and **Access Permission**.

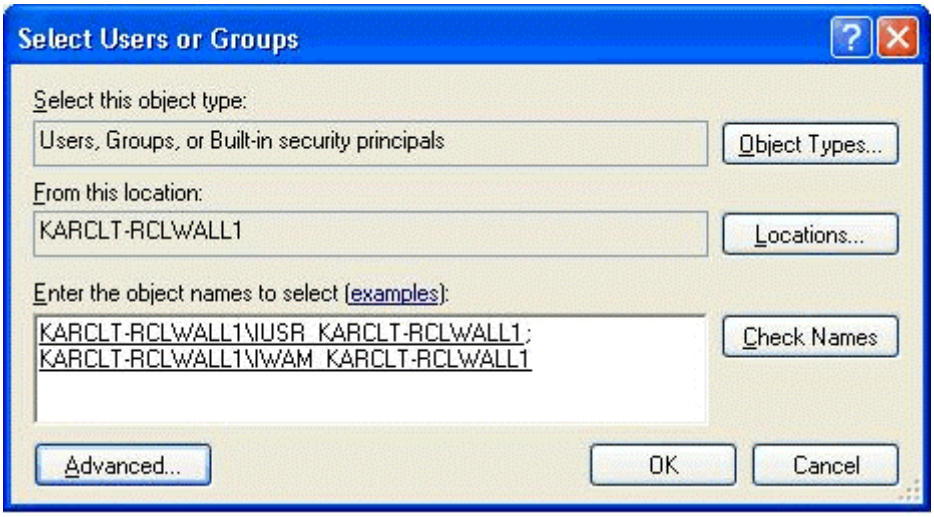
To edit the permissions, select **Customize**.

14.5.2.1 Launch Permissions



Select **Add** to enter the local users **IUSR** and **IWAM**.

Make sure that the local computer is sselected!

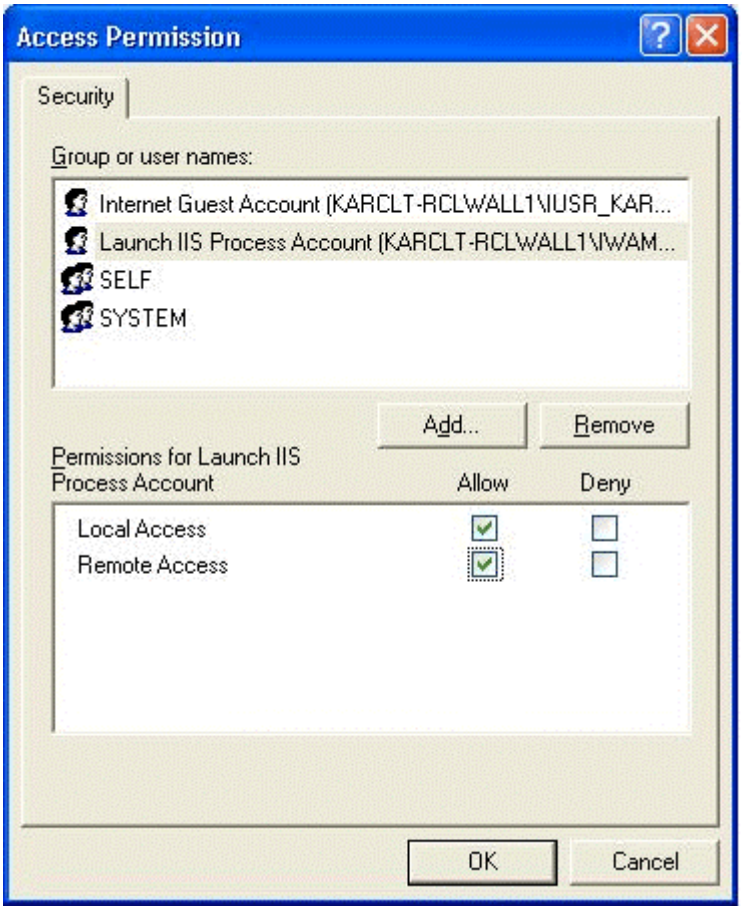


Add the following users:

- IUSR
- IWAM

Subsequently exit the dialog by clicking **OK**.

14.5.2.2 Access Permissions



The local users **IUSR** and **IWAM** have to be given access rights.

Subsequently **reboot** the system!

14.5.3 How to check the Apollo API

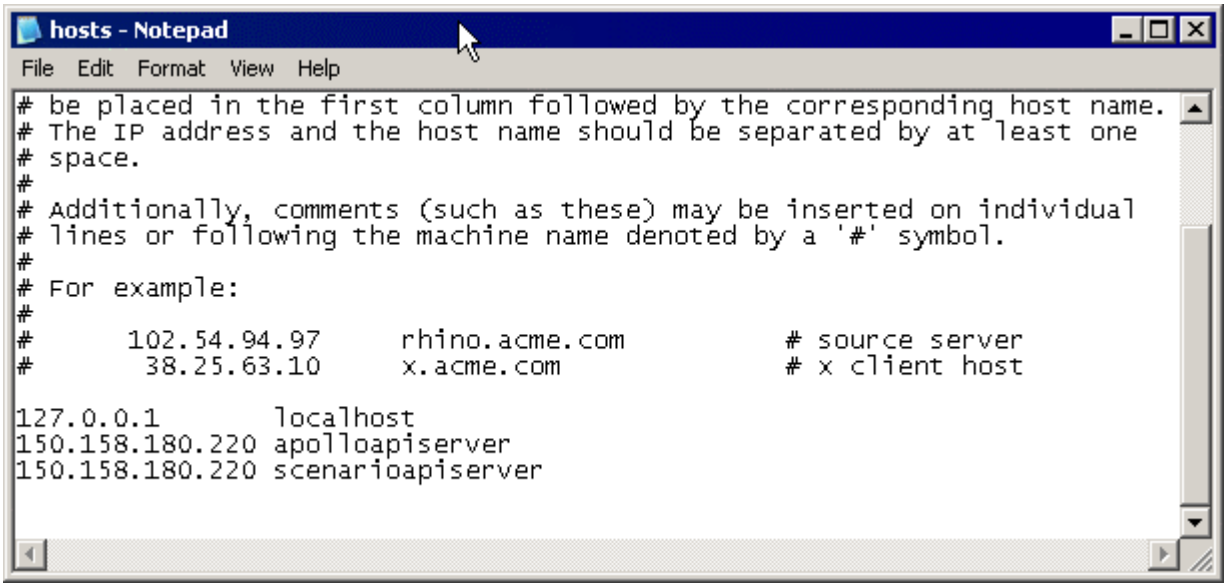
To check if the server is online,

- Open the command prompt
- Subsequently enter the commands:
  Ping ApolloApiServer

If the server answer, it is running and connected.

If there is no response, navigate to...Windows\System32\drivers\etc.

Edit the file **Hosts** and check the IP addresses for the ApolloApiServer

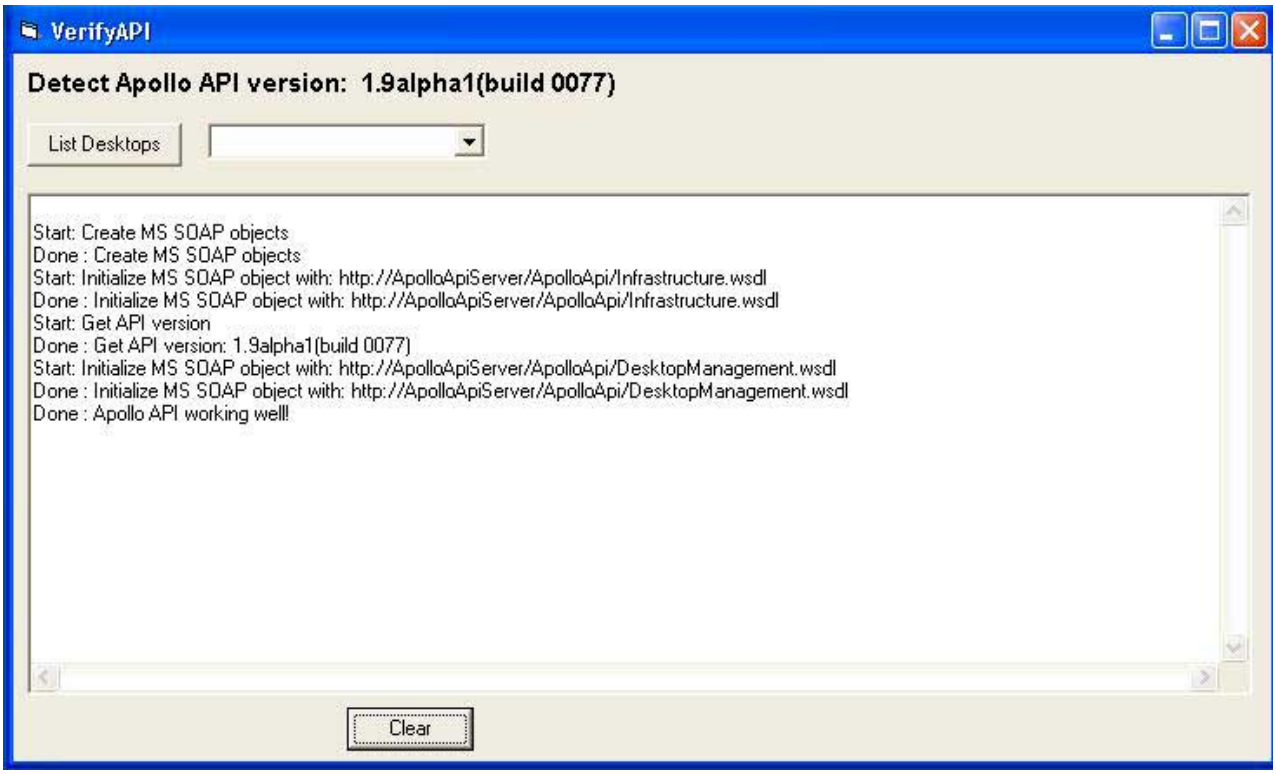

hosts - Notepad
File Edit Format View Help
be placed in the first column followed by the corresponding host name.
The IP address and the host name should be separated by at least one
space.
#
Additionally, comments (such as these) may be inserted on individual
lines or following the machine name denoted by a '#' symbol.
#
For example:
#
102.54.94.97   rhino.acme.com   # source server
38.25.63.10   x.acme.com   # x client host
127.0.0.1   localhost
150.158.180.220 apolloapiserver
150.158.180.220 scenarioapiserver

To check the correct installation of Apollo and the Apollo API, use the tool VerifyAPI.exe provided on the Apollo CD-ROM:

- Navigate to the folder **Apollo (CRS-3045)\Apollo 1.9\API**
- Double click on **VerifyAPI.exe**

The verification tool launches and checks the configuration. If everything is ok, after several instances it shows the build of the Apollo Software.

In a second step you can click on the button "List Desktops". The tool will look for all desktop servers of the related Apollo project and lists them. The entries of the list can be viewed opening the list box:


VerifyAPI
Detect Apollo API version: 1.9alpha1(build 0077)
List Desktops
Start: Create MS SOAP objects
Done : Create MS SOAP objects
Start: Initialize MS SOAP object with: http://ApolloApiServer/ApolloApi/Infrastructure.wsdl
Done : Initialize MS SOAP object with: http://ApolloApiServer/ApolloApi/Infrastructure.wsdl
Start: Get API version
Done : Get API version: 1.9alpha1(build 0077)
Start: Initialize MS SOAP object with: http://ApolloApiServer/ApolloApi/DesktopManagement.wsdl
Done : Initialize MS SOAP object with: http://ApolloApiServer/ApolloApi/DesktopManagement.wsdl
Done : Apollo API working well!
Clear

15 Appendix

15.1 Commands via keyboard

Please note the following issues when sending keyboard input to a window:

- To send one of the following characters, enclose it in curly brackets:
- + ^ % ~ ( ) [ ] { }

Example: For the plus sign, enter **{+}.**

- Non printable characters are represented by the following codes:

Key	Code
BACKSPACE	{BACKSPACE}, {BS}, or {BKSP}
BREAK	{BREAK}
CAPS LOCK	{CAPSLOCK}
DEL or DELETE	{DELETE} or {DEL}
DOWN ARROW	{DOWN}
END	{END}
ENTER	{ENTER}or ~
ESC	{ESC}
HELP	{HELP}
HOME	{HOME}
INS or INSERT	{INSERT} or {INS}
LEFT ARROW	{LEFT}
NUM LOCK	{NUMLOCK}
PAGE DOWN	{PGDN}
PAGE UP	{PGUP}
PRINT SCREEN	{PRTSC}
RIGHT ARROW	{RIGHT}
SCROLL LOCK	{SCROLLLOCK}
TAB	{TAB}
UP ARROW	{UP}

Key	Code
F1	{F1}
F2	{F2}
F3	{F3}
F4	{F4}
F5	{F5}
F6	{F6}
F7	{F7}
F8	{F8}
F9	{F9}
F10	{F10}
F11	{F11}
F12	{F12}
F13	{F13}
F14	{F14}
F15	{F15}
F16	{F16}

Use the following codes for key combinations with the SHIFT, Control, or ALT keys:

Key	Code
SHIFT Key	+
CONTROL Key	^
ALT Key	%

15.2 Identifying windows

If you specify the title of a window in the **Layout Editor** module, you can enter placeholders for characters and digits..

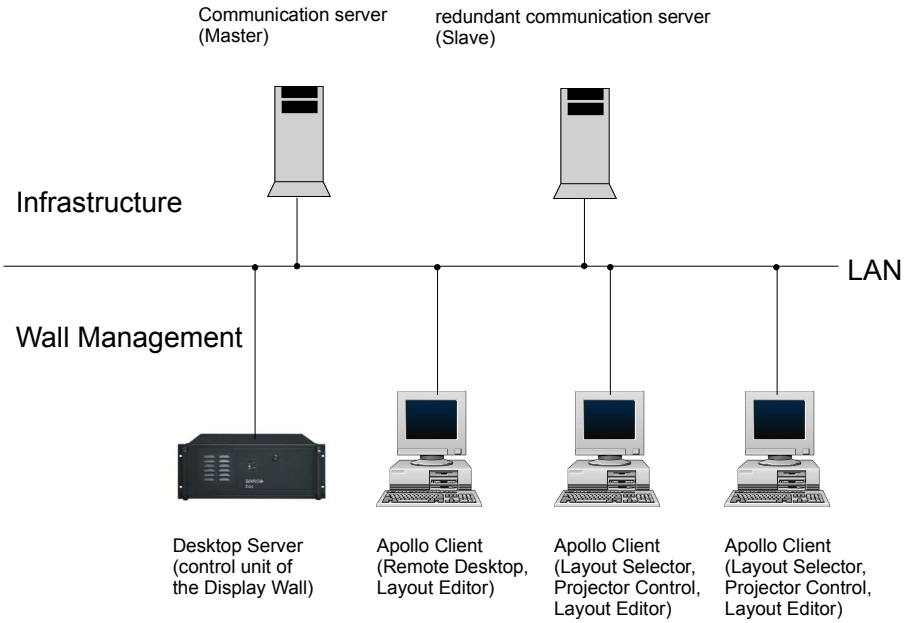
Placeholder	Meaning
?	Any single character
*	Zero or more characters
#	Any single digit (0-9)
[*List*]	Individual character in *List*
[!*List*]	Individual character not contained in *List*

- An entire range can be indicated in a list by using a hyphen, e.g. **[A-M]**.
- If a special character is not to be used as placeholder, it is enclosed in square brackets, e.g., **[#]**., **[[]**

15.3 Redundant Apollo System

The **Control Room Bus** supplies the communication infrastructure for the computers integrated into the Apollo network. A redundant Apollo system can be generated to ensure the max. availability of this infrastructure. Such a redundant system monitors the function of the communication server and assumes the functions of this server in case of malfunction or failure.

A redundant Apollo system consists of a communication server master and a communication server slave , which start the **Control Room Database**, the **Desktop Server** running on the control computer of the Display Wall, and the computers of the client components (**Remote Desktop, Layout Selector**, etc.)



15.3.1 Setup

The configuration has to be created with the help of the Visio template **Control Room Configuration** and the configuration files have to be exported.

15.3.1.1 Master:

Select only **Display Wall** in the **Select Components** dialog.

Once the installation is finished, the configuration files **Filename_Name of Master Computer** generated by the **Control Room Configurator** have to be copied to the Apollo project directory of the master.

15.3.1.2 Slave:

Select only **Display Wall** in the **Select Components** dialog.

Once the installation is finished, the configuration files **Filename_Name of Slave Computer** generated by the **Control Room Configurator** have to be copied to the Apollo project directory of the master.

15.3.2 System checkup

Click with the right mouse on the **Control Room Bus** icon to open the context menu. Use the **Viewers | Component Viewers** menu option to display a list of all active computers within the Apollo network. The list should display the name of the master as well as that of the slave. If only one name is listed the other computer's functionalities have to be checked to maintain redundancy.

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15.4 Placeholders for In Display Caption Texts

Placeholder	Description
%SourceRequested%	The CRB (control room bus) name of the source to be displayed. This name has been defined in the **ServerData\viewersources.ini** file. This placeholder normally corresponds with the %SourceConnected% placeholder
%SourceConnected%	CRB name of the source currently displayed. For predefined sources, this name has been defined in the **ServerData\viewersources.ini** file. For non-predefined sources, the name can freely be assigned to using this parameter
%SourceCaption%	Suitable name for the currently displayed source
%SourceTitle%	A title assigned to the source is depicted.
%Description%	Suitable name of the viewer instance
%Date%	Current date
%Time%	Current time
%Status%	Connection status or status of data stream after connection has been established. Status display description: Not connected (viewer waits for the control room bus); viewer is active but cannot be controlled in this state. Unknown source: The name of the source is unknown to the control room bus. Connecting ... : Waiting for the source object Unknown resource: (e.g., incorrect Visu input card, wrong channel with BigVideo, Quadvideo, RGB input cards, wrong workstation (Cottus), etc. Resource unavailable (the corresponding source is already controlled by another server within the Apollo network)

15.4.1 Specific FRG Viewer placeholders

Placeholder	Description
%Channel%	Active channel of input card
%Port%	Active port of input card
%SVSSourceName%	source name of source connected to Streaming Video Card
%Status%	Freeze frame (video stopped) Playback Connecting with Manager (a connection with the Manager software is being established)

15.4.2 Specific Visu Viewer placeholders

Placeholder	Description
%IPUs%	Number of video input card (“1, 5, 10”)
%DeviceName%	Control room bus name for connected Visu device
%Status%	Freeze frame (video stopped) Playback Connecting with Manager (a connection with the Manager software is being established)

15.4.3 Specific Cottus Viewer placeholders

Placeholder	Description
%Hostname%	Name of connected workstation
%Status%	State of connection

15.4.4 Specific VNC Viewer placeholders

Placeholder	Description
%Hostname%	Name of connected workstation
%Status%	State of connection

15.4.5 Specific Pro Viewer placeholders

Placeholder	Description
%Hostname%	Name of connected workstation
%Status%	Status of connection

15.4.6 Specific Web Viewer placeholders

Placeholder	Description
%URL%	Name of Internet page
%Status%	Loading (page is loading) Ready (page has finished loading)

15.4.7 Specific MPEG Viewer placeholders

Platzhalter	description
%URL%	Name of digital data stream
%Position%	Position in digital Datenstrom
%Marker%	Name of current marker in the data stream (only if markers are supported)
%Status%	Pause: the Mpeg-data stream is paused (if resumed, it starts playing at the actual position) Stop: the Mpeg data stream is stopped (if resumed, it starts playing at the beginning)

15.4.8 Specific VTplus Viewer placeholders

Placeholder	Description
%Channel%	Name of videotext channel
%Page%	Number of videotext page
%SubPage%	Number of videotext subpage
%Status% (specific values)	Loading (page is loading) Ready (page has finished loading) Connecting with Manager (a connection with the Manager software is being established)

15.5 Overview: List of commandline parameters and their shortcuts

Please note that some parameters are only available when starting the application via a command line (and not to control the application), e.g. StartMinimized

CommandLine Parameter	Short forms	Security Provider	Viewer Command	Fra Viewer	Visu Viewer	Web Viewer	Cottus Viewer	Mpeg Viewer	VTPlus Viewer	Pro Viewer	VNC Viewer	Remote Pointer	Apollo Explorer	Path Finder	DB Converter	Layout Editor	Layout Selector	Remote Desktop	Wnd Descriptor	SveLayout Launcher	Desktop Command	Device Command	Device Manager	Visu Mngr Holder	Remote Control	Source Initializer	Window Detector
ActiveLamp	al																					x					
ActiveSourceSlot	ass																					x					
AspectRatio	ar												x														
AspectRatio	asprat												x														
AudioBalance	ab		x					x																			
AudioVolume	av		x					x																			
AutoDetect	ad		x	x							x																
AutoPhsePosDetect	Appd			x							x																
AutoResize	arz		x							x																	
AutoScrollWidth	asw		x									x															
Backup	bck																					x					
BorderVisible	bv		x	x	x	x	x	x	x	x	x																
BottomHost	bhst		x									x															
BottomHostPassword	bhstpwd		x									x															
Brightness	br		x	x																		x					
BrightnessBlue	brb																					x					
BrightnessGrenn	brg																					x					
BrightnessRed	brr																					x					
BrightnessTarget	brt																					x					
BrowserStatus	bs		x			x																					
ButtonPanel	bp												x														
ButtonPanel	btnpnl												x														
ByType	bt												x														
CaptionVisible	cv		x	x	x	x	x	x	x	x	x																
Channel	ch		x	x					x					x												x	
ColumnWidth1	colw1												x														
ColumnWidth1	cw1												x														
ColumnWidth2	colw2												x														
ColumnWidth2	cw2												x														

CommandLine Parameter	Short forms	Security Provider	Viewer Command	Fra Viewer	Visu Viewer	Web Viewer	Cottus Viewer	Mpeg Viewer	VTPlus Viewer	Pro Viewer	VNC Viewer	Remote Pointer	Apollo Explorer	Path Finder	DB Converter	Layout Editor	Layout Selector	Remote Desktop	Wnd Descriptor	SveLayout Launcher	Desktop Command	Device Command	Device Manager	Visu Mngr Holder	Remote Control	Source Initializer	Window Detector
CompressLevel	cl																										
ConfigFile	cf																						x				
ConfiguredTests	ct													x													
Connection	c												x														
Connection	con												x														
Contrast	co			x																	x						
ContrastBlue	cob																				x						
ContrastGreen	cog																				x						
ContrastRed	cor																				x						
CopyRectEncoding	cre		x							x	x																
Database	db														x												
DeInterlacerMode	dim			x																							
Description	dscr		x	x	x	x	x	x	x	x	x																
DesktopLocked	dl												x														
DesktopLocked	dsklock												x														
DeviceName	dn		x		x																						
DisconnectFrom	df		X							X		x															
DoZordering	dz																						x				
EightBitsPixel	ebp		x							x	x																
EnableAudio	ea		x					x																			
EnableClipboard	ec		x							x	x																
EnableJpegCompression	ejc		x							x	x																
EnableLoopMode	elm									x		x															
EnableMagnifier	em		x									x															
EnableRemoteHost	erh						x			x	x																
EnableScaleMode	esm		x				x																				
EnableScrollBars	esb		x				x																				
Encoding	enc		x							x	x																
End	end		x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x							
FontName	fnt		x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x			x				
FontSize	fntsz		x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x			x				
Framerate	fr		x	x																							
FrameRateReduction	frr		x	x																							
FrameRateReductionMode	frrm		x	x																							
FullNames	fn												x														
GatewayName	gwn		x				x																				

CommandLine Parameter	Short forms	Security Provider	Viewer Command	Era Viewer	Visu Viewer	Web Viewer	Cottus Viewer	Mpeg Viewer	VTPlus Viewer	Pro Viewer	VNC Viewer	Remote Pointer	Apollo Explorer	Path Finder	DB Converter	Layout Editor	Layout Selector	Remote Desktop	Wnd Descriptor	SveLayout Launcher	Desktop Command	Device Command	Device Manager	Visu Mngr Holder	Remote Control	Source Initializer	Window Detector
Go	go		x			x																					
Height	h											x	x		x	x	x	x	x								
Help	?		x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x								
Hide	hide		x																		x	x					
HostName	hn		x				x			x	x	x															
HostServerType	hst		X							X		x															
HostServerPort	hsp		X							X		x															
HotKeyDefinitionAltEsc	hkdae									X																	
HotKeyDefinitionAltTab	hkdat									X																	
HotKeyDefinitionConnect	hkdc									X																	
HotKeyDefinitionCtrlAltDel	hkdcad									X																	
HotKeyDefinitionCtrlEsc	hkdce									X																	
HotKeyDefinitionDisconnect	hkdd									X																	
HotKeyDefinitionRelease-Control	hkdrc									X																	
HotKeyDefinition-ShowUserManual	hkdsum									X																	
HotKeyEnabledAltEsc	hkeae									X																	
HotKeyEnabledAltTab	hkeat									X																	
HotKeyEnabledConnect	hkec									X																	
HotKeyEnabledCtrlAltDel	hkecad									X																	
HotKeyEnabledCtrlEsc	hkece									X																	
HotKeyEnabledDisconnect	hked									X																	
HotKeyEnabledRelease-Contol	hkerc									X																	
HotKeyEnabledShowUser-Manual	hkesum									X																	
HotKeyResetToDefault	hkrtd									x																	
HideAppWhileControlling	hawc		x				x			X	x	x															
Hue	hue		x	x																							
HWBackgroundBlue	hwbb		x		x																						
HWBackgroundGreen	hwbg		x		x																						
HWBackgroundRed	hwbr		x		x																						
HWColorKeyBlue	hwcb		x		x																						
HWColorKeyGreen	hwcg		x		x																						
HWColorKeyRed	hwcr		x		x																						
HWFrameRateDivider	hwfrd		x		x																						

CommandLine Parameter	Short forms	Security Provider	Viewer Command	Era Viewer	Visu Viewer	Web Viewer	Cottus Viewer	Mpeg Viewer	VTPlus Viewer	Pro Viewer	VNC Viewer	Remote Pointer	Apollo Explorer	Path Finder	DB Converter	Layout Editor	Layout Selector	Remote Desktop	Wnd Descriptor	SveLayout Launcher	Desktop Command	Device Command	Device Manager	Visu Mngr Holder	Remote Control	Source Initializer	Window Detector
HWFrameRateReductionMax	hwfrrm		x		x																						
IconizeApplication	ia		x									x															
IconizeAppOnReleaseCtrl	Iarc		x									x															
Idc[1..4]BackColor	idc[1..4]bc		x	x	x	x	x	x	x	x	x																
Idc[1..4]Enabled	idc[1..4]e		x	x	x	x	x	x	x	x	x																
Idc[1..4]Image	idc[1..4]i		x	x	x	x	x	x	x	x	x																
Idc[1..4]Opaque	idc[1..4]o		x	x	x	x	x	x	x	x	x																
Idc[1..4]Overlap	idc[1..4]ov		x	x	x	x	x	x	x	x	x																
Idc[1..4]Position	idc[1..4]pos		x	x	x	x	x	x	x	x	x																
Idc[1..4]TesxtSize	idc[1..4]ts		x	x	x	x	x	x	x	x	x																
Idc[1..4]Text	idc[1..4]t		x	x	x	x	x	x	x	x	x																
Idc[1..4]TextColor	idc[1..4]tc		x	x	x	x	x	x	x	x	x																
IdcBackColor	idcbc		x	x	x	x	x	x	x	x	x																
IdcBoSLEnabled	idcbosle		x	x			x																				
IdcEnabled	idce		x	x	x	x	x	x	x	x	x																
IdcImage	idci		x	x	x	x	x	x	x	x	x																
IdcOpaque	idco		x	x	x	x	x	x	x	x	x																
IdcOverlap	idcov		x	x	x	x	x	x	x	x	x																
IdcPosition	idcpos		x	x	x	x	x	x	x	x	x																
IdcTesxtSize	idcts		x	x	x	x	x	x	x	x	x																
IdcText	idct		x	x	x	x	x	x	x	x	x																
IdcTextColor	idctc		x	x	x	x	x	x	x	x	x																
Ident	id		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x			x	x	x	x	x
IncBrightness	ibr																				x						
IncBrightnessBlue	ibrb																				x						
IncBrightnessGreen	ibrg																				x						
IncBrightnessRed	ibrr																				x						
IncContrast	ico																				x						
IncContrastBlue	icob																				x						
IncContrastGreen	icog																				x						
IncContrastRed	icor																				x						
InfraredOnOff	iroo																				x						
Input	inp																				x						
IPUs	ipu		x		x																						
IpuSrcType	ipust		x	x																							
JpegQualityLevel	jql		x							x	x																

CommandLine Parameter	Short forms	Security Provider	Viewer Command	Fra Viewer	Visu Viewer	Web Viewer	Cottus Viewer	Mpeg Viewer	VTPlus Viewer	Pro Viewer	VNC Viewer	Remote Pointer	Apollo Explorer	Path Finder	DB Converter	Layout Editor	Layout Selector	Remote Desktop	Wnd Descriptor	SveLayout Launcher	Desktop Command	Device Command	Device Manager	Visu Mngr Holder	Remote Control	Source Initializer	Window Detector
LabelFontName	lblfnt		x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x			x				
LabelFontSize	lblfntsz		x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x			x				
LampMode	lm																					x					
LampOnOff	loo																					x					
LastFrameOnSignalLoss	lfsl			x																		x					
LayoutIconSize	lis												x														
LayoutLoad	ll																				x						
LayoutSelector	laysel												x														
LayoutSelector	ls												x														
LayoutUnLoad	lul																				x						
LayoutUnLoadAll	lula																				x						
Left	l		x									x	x		x	x	x	x	x								
LeftHost	lhst		x									x															
LeftHostPassword	lhstpwd		x									x															
LocatorVisible	lv		x									x															
Marker	mkr		x					x																			
Master	master	x																									
MenuBar	mb												x												x		
Motion	mo		x					x																			
Name	name																				x	x					
Navigate	nav		x			x																					
ObjectTree	ot												x														
OptimizeMirror	om																					x					
Output	out																				x						
Page	pg		x						x																		
PassWord	pwd		x				x			x	x	x															
PictureFreeze	picf																				x						
PlayerAction	pa		x				x																				
Port	port		x	x																							
Position	pos							x																			
PresetName	Psn		X	X						x											x						
ProjectorStandBy	psb																				x						
PropertyPage	pp		x	x	x	x	x	x	x	x	x																
PropertyPageAccelerator	ppa		x	x	x	x	x	x	x	x	x																
PropertyPagePermission	ppp		x	x	x	x	x	x	x	x	x																
ReconnectionTimeInterval	Rti		X			X		X	x				x														

CommandLine Parameter	Short forms	Security Provider	Viewer Command	Era Viewer	Visu Viewer	Web Viewer	Cottus Viewer	Mpeg Viewer	VTPlus Viewer	Pro Viewer	VNC Viewer	Remote Pointer	Apollo Explorer	Path Finder	DB Converter	Layout Editor	Layout Selector	Remote Desktop	Wnd Descriptor	SveLayout Launcher	Desktop Command	Device Command	Device Manager	Visu Mngr Holder	Remote Control	Source Initializer	Window Detector
Refresh	r												x														
Region	rgn																			x	x						
RegionH	rh		x							x																	
RegionW	rw		x							x																	
RegionX	rx		x							x																	
RegionY	ry		x							x																	
RemoteDesktop	rd												x														
RemoteDesktop	remdsk												x														
RemoteSettingsEnabled	Se		X	x																							
RemoteSettingsLocigcalHost-name	Rslhn		X	x																							
Restore	rst																					x					
RGBBlue	rgbb		x	x																							
RGBBlueCoarseGain	rgbbcg		x		x																						
RGBBlueCoarseGainOffset	rgbbcgo		x		x																						
RGBBlueCutOff	rgbbco		x		x																						
RGBBlueCutOffOffset	rgbbcoo		x		x																						
RGBBlueFineGain	rgbbfg		x		x																						
RGBBlueFineGainOffset	rgbbfgo		x		x																						
RGBGreen	rgbg		x	x																							
RGBGreenCoarseGain	rgbgcg		x		x																						
RGBGreenCoarseGainOffset	rgcgo		x		x																						
RGBGreenCutOff	rgbgco		x		x																						
RGBGreenCutOffOffset	rgbgcoo		x		x																						
RGBGreenFineGain	rgbgfg		x		x																						
RGBGreenFineGainOffset	rgbgfgo		x		x																						
RGBHorzPhase	rgbhp		x		x																						
RGBHorzRes	rgbhr		x		x																						
RGBHorztotalPixels	rgbhpx		x		x																						
RGBInputType	rgbit		x		x																						
RGBPresetName	rgbpn		x	x																							
RGBProfileName	rgbpfn		x	x	x																						
RGBRed	rgbr		x	x																							
RGBRedCoarseGain	rgbrcg		x		x																						
RGBRedCoarseGainOffset	rgbrcgo		x		x																						
RGBRedCutOff	rgbrco		x		x																						

CommandLine Parameter	Short forms	Security Provider	Viewer Command	Fra Viewer	Visu Viewer	Web Viewer	Cottus Viewer	Mpeg Viewer	VTPlus Viewer	Pro Viewer	VNC Viewer	Remote Pointer	Apollo Explorer	Path Finder	DB Converter	Layout Editor	Layout Selector	Remote Desktop	Wnd Descriptor	SveLayout Launcher	Desktop Command	Device Command	Device Manager	Visu Mngr Holder	Remote Control	Source Initializer	Window Detector
RGBRedCutOffOffset	rgbrcoo		x		x																						
RGBRedFineGain	rgbrfg		x		x																						
RGBRedFineGainOffset	rgbrfgo		x		x																						
RGBReduction	rgbred		x	x																							
RGBSamplingPhase	rgbsp		x		x																						
RGBVertPhase	rgbvp		x		x																						
RGBVertRes	rgbvr		x		x																						
RightHost	rhst		x									x															
RightHostPassword	rhstpwd		x									x															
Saturation	sat		x	x																							
ScaleZoomFactor	szf		x				x																				
ScalingViewPortPosPercent	svppe		x				x																				
ScalingViewPortPosPixel	svppx		x				x																				
ScalingViewPortPosUnitType	svput		x				x																				
SclPixelFormat	sclpf		x	x																							
SclPixelFormatAutomatic	sclpfa		x	x																							
SclSharpness	sclsh		x	x																							
ScrapingMode	spm		x							x																	
Select	s												x												x		
Select	sel												x												x		
Selector	se																								x		
SelectorLocked	sellock												x														
SelectorLocked	sl												x														
Send	send																				x						
Server	svr																			x							
SessionLength	slen		x				x																				
SessionName	sn		x				x																				
SetWindow	sw		x							x																	
Sharpness	sh		x	x																							
Shortcut	shrtc																				x						
Show	show	x	x																		x	x					
Silent	slt														x												
Slave	slave	x																									
SourceCaption	scap		x	x	x	x	x	x	x	x	x																
SourceConnected	sc		x	x	x	x	x	x	x	x	x	x															

CommandLine Parameter	Short forms	Security Provider	Viewer Command	Era Viewer	Visu Viewer	Web Viewer	Cottus Viewer	Mpeg Viewer	VTPlus Viewer	Pro Viewer	VNC Viewer	Remote Pointer	Apollo Explorer	Path Finder	DB Converter	Layout Editor	Layout Selector	Remote Desktop	Wnd Descriptor	SveLayout Launcher	Desktop Command	Device Command	Device Manager	Visu Mngr Holder	Remote Control	Source Initializer	Window Detector
SourceRequested	sr		x	x	x	x	x	x	x	x	x	x															
SourceSlotSelectionMode	sssm																				x						
SourceTitle	srct		x	x	x	x	x	x	x	x	x																
Splash	spl		x									x	x		x	x	x	x	x								
SplitterButtonsStack	sbs												x														
SplitterButtonsStack	sbtnstk												x														
SplitterPosition	sp												x														
SplitterPosition	splitpos												x														
SplitterSelectorDesktop	ssd												x														
SplitterSelectorDesktop	sseldsk												x														
SplitterTaskbarDesktop	std												x														
SplitterTaskbarDesktop	stskbdsk												x														
SquidHoverLatencyIntervals e	shli		x									x															
SquidMode	smod		x									x															
SrcProfileName	spfn		x	x	x																						
Stack	st												x														
StartMinimized	sm		x	x	x	x	x	x	x	x	x																
StatusBar	sb												x												x		
StatusBarVisible	sbv		x	x	x	x	x	x	x	x	x																
StatusBorderBlinkPeriod	sbbp		x	x	x	x	x	x	x	x	x																
StatusBorderEnableBlink	sbeb		x	x	x	x	x	x	x	x	x																
StatusBorderEnabled	sbe		x	x	x	x	x	x	x	x	x																
StatusBorderLineBlinkColor	sblbc		x	x	x	x	x	x	x	x	x																
StatusBorderLineBlinkGapColor	sblbgc		x	x	x	x	x	x	x	x	x																
StatusBorderLineColor	sblc		x	x	x	x	x	x	x	x	x																
StatusBorderLineGapColor	sblgc		x	x	x	x	x	x	x	x	x																
StatusBorderLineStyle	sbls		x	x	x	x	x	x	x	x	x																
StatusBorderLineWidth	sblw		x	x	x	x	x	x	x	x	x																
StatusBorderSeparatorWidth	sbsw		x	x	x	x	x	x	x	x	x																
SubPage	spg		x						x																		
SVBAddress	svba		x	x																							
SVBCodecName	svbcn		x	x																							
SVBGateway	svbg		x	x																							
SVBNetmask	svbn		x	x																							

CommandLine Parameter	Short forms	Security Provider	Viewer Command	Fra Viewer	Visu Viewer	Web Viewer	Cottus Viewer	Mpeg Viewer	VTPlus Viewer	Pro Viewer	VNC Viewer	Remote Pointer	Apollo Explorer	Path Finder	DB Converter	Layout Editor	Layout Selector	Remote Desktop	Wnd Descriptor	SveLayout Launcher	Desktop Command	Device Command	Device Manager	Visu Mngr Holder	Remote Control	Source Initializer	Window Detector
SVSAddress	svsa		x	x																							
SVSEncAddress	svsea		x	x																							
SVSEncPort	svsep		x	x																							
SVSEncProtocolId	svsepi		x	x																							
SVSEncStartCmd	svsesc		x	x																							
SVSEncTypeName	svsetn		x	x																							
SVSPid	svspid		x	x																							
SVSPort	svsp		x	x																							
SVSProtocolId	svspi		x	x																							
SVSSkipAtEnd	svssae		x	x																							
SVSSkipAtStart	svssas		x	x																							
SVSSrcName	svssn		x	x																							
SVSStreamProtocolId	svsspi		x	x																							
SwitchBoxInput	sbi																				x						
TakeControl	tc		x									x															
TaskBar	tsk												x														
TaskBar	tskbar												x														
TextMode	tm		x						x																		
TextSize	ts		x			x																					
ToolBar	tb												x												x		
Top	t		x									x	x		x	x	x	x	x								
TopHost	thst		x									x															
TopHostPassword	thstpwd		x									x															
Transparancy	Tp		X	x																					x		
Types	t																								x		
UdateModeManualTimeInterval	Ummti		X								X																
UdateModeModus	Umm		X							X																	
URL	url		x			x		x																			
UseCompressLevel	ucl		x							x	x																
UseRegions	urg														x												
Verbose	v		x	x																							
VideoFormat	vf		x		x																						
VideoInputType	vit		x		x																						
VideoMute	vm																				x						
VideoNorm	vn		x	x	x																						
VideoSourceRatioToForceTo	Vsrf		x	x																							

CommandLine Parameter	Short forms	Security Provider	Viewer Command	Era Viewer	Visu Viewer	Web Viewer	Cottus Viewer	Mpeg Viewer	VTPlus Viewer	Pro Viewer	VNC Viewer	Remote Pointer	Apollo Explorer	Path Finder	DB Converter	Layout Editor	Layout Selector	Remote Desktop	Wnd Descriptor	SveLayout Launcher	Desktop Command	Device Command	Device Manager	Visu Mngr Holder	Remote Control	Source Initializer	Window Detector
ViewerPeerTests	vpt													x													
Width	w		x									x	x		x	x	x	x	x								
WiringTests	wt													x													
WndForceHorzScaling	wndfhs		x		x																						
WndForceHorzvVertScaling	wndfs		x		x																						
WndForceVertScaling	wndfvs		x		x																						
WndFreeze	wndf		x	x	x																						
WndScaleMode	wndsm		x	x	x					x	x																
WndViewport	wndvp		x	x	x																						
WndViewportRatio	wndvpr		x	x	x																						

15.6 Escape sequences supported by the send command of the Serial Interface

Escape Sequence	Represents
\a	Bell (alert)
\b	Backspace
\f	Formfeed
\n	New line
\r	Carriage return
\t	Horizontal tab
\v	Vertical tab
\'	Single quotation mark
****	Backslash
\?	Literal question mark
*****ooo*	ASCII character in octal notation
\x*hhh*	ASCII character in hexadecimal notation

Octal notation:

The ASCII character is entered with up to three digits. Subsequent ASCII characters have to be separted by "\"

The following example sends "[0] abc [1] de [13]" to the serial interface:

"%ApolloProgram%\devicecmd.exe" -name:Wall1.Port1 -Send:"\0 abc \1 de \15"

Hexadecimal notation:

The ASCII character has to be entered as a two digit value. Subsequent ASCII characters are just added. Evaluation of the string as notation in hexadecimal stops as soon as a character can not be taken as a hexadecimal digit

The following example sends "[1 2 3 4 171]Hallo" to the serial interface:

"%ApolloProgram%\devicecmd.exe" -name:Wall1.Port1 -Send:"\x01020304ABHallo"

The \" is not supported, since the double quotation mark is used to brace the parameters of the command line. To send the double quoatation mark ", use its octal notation \042

To send "Hello World", the following command has to be entered:

"%ApolloProgram%\devicecmd.exe" -name:Wall1.Port1 -Send: "\042Hello World\042"

16 Hotline

16.1 Addresses

Please do not hesitate to contact us if you have any questions..

- **Barco Control Rooms GmbH**
  An der Rossweid 5, D-76229 Karlsruhe
  Phone: +49-721-6201-0, Fax: +49-721-6201-298
  E-mail: info.de.bcd@barco.com, Web: www.barcocontrolrooms.de
- **BARCO N.V. Projection Systems**
  Nordlaan 5, B-8520 Kuurne
  Phone: +32-56-36-8282, Fax: +32-56-368-251
  E-mail: support.controlrooms@barco.com, Web: www.barcocontrolrooms.com